

Bethany C. Bray
Curriculum Vitae

Center for Dissemination and Implementation Science
Department of Medicine, College of Medicine
The University of Illinois at Chicago
Room 324 SRH, M/C 579
818 South Wolcott Avenue
Chicago, IL 60612

Office: 312-996-9848
Email: bcbay@uic.edu
Website: bcbay.com
Website: go.uic.edu/cdis

Current Positions

Apr 2019-Present	Associate Director for Scientific Outreach, Center for Dissemination and Implementation Science, The University of Illinois at Chicago
Apr 2019-Present	Associate Professor (Visiting), Department of Medicine, College of Medicine, The University of Illinois at Chicago

Education

2007	Ph.D.	Human Development and Family Studies, Penn State
2006	M.A.S.	Applied Statistics, Penn State
2005	M.S.	Human Development and Family Studies, Penn State
2000	B.S.	Mathematics and Applied Statistics, The University of Michigan, Dearborn

Honors and Awards

2016	National Center for Responsible Gaming 17 th Annual Conference Poster Session Honorable Mention
2015	University of Nebraska – Lincoln, Methodology, Analytics, & Psychometrics (MAP) Academy Emerging Scholar, Inaugural Recipient
2012	Virginia Tech AdvanceVT Mentoring Micro-Grant Award (\$1,500)
2008-2010	NIH Loan Repayment Program Award: <i>Drug use and comorbid problem behaviors</i> (L30-DA-025349)
2008	National Council on Problem Gambling Outstanding Dissertation Award
2006-2007	Society for Prevention Research Early Career Travel Awards
2005-2007	Prevention and Methodology Training Program Pre-Doctoral Research Fellowship (T32-DA-017629)

Past Positions

2016-2019	Associate Director, The Methodology Center, Penn State
2016-2019	Associate Research Professor, College of Health and Human Development, Penn State
2015-2019	Associate Training Director, Prevention and Methodology Training Program (PAMT), The Methodology Center and Edna Bennett Pierce Prevention Research Center, Penn State
2014-2016	Outreach Director, The Methodology Center, Penn State
2014-2016	Assistant Research Professor, College of Health and Human Development, Penn State
2013-2014	Research Associate, The Methodology Center, Penn State
2012-2013	Visiting Faculty, The Methodology Center, Penn State
2009-2013	Assistant Professor, Department of Psychology, Virginia Tech
2007-2009	Assistant Director, The Methodology Center, Penn State
2007-2009	Research Associate, The Methodology Center, Penn State
2005-2007	Research Assistant, The Prevention Research Center, Penn State
2002-2007	Research Assistant, The Methodology Center, Penn State

2001-2002 Research Assistant, The Methodology Center, The University of Michigan
 1999-2000 Research Assistant, College of Arts, Sciences and Letters, The University of Michigan-Dearborn

Research Support

Active Support – National Institutes of Health

(pending) Institutional and interpersonal racism among urban African American adolescents
 R21 MD014801 NIH/NIMHD Lambert (PI) 09/01/2020-08/31/2022
 Role: Subcontract PI

Understanding for whom family-based substance use prevention programs work best: A person-centered approach
 F31 DA048522 NIH/NIDA LoBraico (PI) 08/01/2019-07/31/2021
 Role: Co-Sponsor

Young men of color who have sex with men cohort study
 U01 DA036926 NIH/NIDA Kipke (PI) 11/01/2017-07/31/2020
 Role: Subcontract PI

Center for complex data to knowledge in drug abuse and HIV behavioral science
 P50 DA039839 NIH/NIDA Collins (PI) 09/01/2015-07/31/2020
 Role: Core Director, Scientific Project Co-Investigator

Drug abuse and HIV prevention research methodology conferences
 R13 DA020334 NIH/NIDA Bray (PI) 01/01/2013-05/31/2021
 Role: PI (10/01/2017-05/31/2021); Co-Investigator (01/01/2013-09/30/2017)

Active Support – Other

2015 Indiana SPF PFS (Strategic Prevention Framework Partnerships for Success)
 U79 SP020788 SAMHSA Watson (PI) 01/01/2020-06/30/2020
 Role: Co-Investigator
 Full list of funding sources: Indiana Family and Social Services Agency, Indiana Division of Mental Health and Addiction and the Center for Substance Abuse Prevention, Substance Abuse and Mental Health Services Administration

Past Support – National Institutes of Health

Dynamic links between risk factors, substance use, and consequences: Ages 18-35
 R01 DA037902 NIH/NIDA Patrick (PI) 04/01/2015-12/31/2019
 Role: Subcontract PI (09/01/2017-12/31/2019); Co-Investigator (04/01/2015-08/31/2017)

Identifying sources of neurocognitive heterogeneity in ADHD and anxiety
 R56 MH084947 NIH/NIMH Huang-Pollock (PI) 12/01/2017-04/01/2019
 Role: Co-Investigator

Prevention and methodology training (PAMT)
 T32 DA017629 NIH/NIDA Collins, Greenberg (PIs) 01/01/2015-04/01/2019
 Role: Co-Investigator

Center for prevention and treatment methodology
 P50 DA10075 NIH/NIDA Collins (PI) 08/01/2012-08/31/2016
 Role: Co-Investigator

Relating brain maturation to impulse control and substance use development
 R01 DA0339997 NIH/NIDA Acheson, Dougherty (PIs) 06/15/2012-08/31/2014
 Role: Subcontract PI

Consequences of adolescent substance use on the development of impulse control
 R01 DA026868 NIH/NIDA Dougherty (PI) 05/15/2010-08/31/2014
 Role: Subcontract PI

Past Support – Other

Team drinking norms and student-athletes' alcohol use: A longitudinal investigation of the directionality and moderators on this association			
Graduate Student Research Grant	Graupensperger (PI)		08/01/2018-07/31/2019
North American Society for the Psychology of Sport and Physical Activity			
Role: Co-Sponsor			
Bolsa Estágio de Pesquisa no Exterior			
Scholarship	FAPESP	Higuchi (PI)	04/03/2017-10/02/2017
Role: Training Sponsor			
Economic and Social Research Council overseas institutional visits scheme			
Training Award	ESRC-UCL	Mawditt (PI)	05/01/2016-07/31/2016
Role: Training Sponsor			
Consequences of gambling and polysubstance use behavior patterns			
Seed Grant	NCRG	Bray (PI)	06/01/2015-12/31/2016
Total Costs: \$30,000			
Alcohol use and gambling in college: Examining unique aspects, shared aspects, and event-level co-occurrence of behaviors			
Grant Program	ABMRF	Bray (PI)	06/01/2008-08/31/2012
Total Costs: \$100,000			
Unique and shared aspects of alcohol use and gambling in college: A pilot study to inform behavior assessment			
Level 1 Funding	CYFC/SSRI	Bray (PI)	03/01/2008-08/31/2008
Total Costs: \$1,500			
Understanding the comorbidity between gambling and substance use through the development and application of latent class methodologies			
The Methodology Center		Bray (PI)	09/01/2007-08/31/2008
Total Costs: \$17,610			

Publications

** Denotes paper on which role was solely to provide latent class modeling expertise

* Denotes graduate student, or post-doctoral or other fellow

Peer-Reviewed Papers

61. Kipke, M. D., Kubicek, K., Akinyemi, I., Hawkins, W., Belzer, M., Bhandari, S., & **Bray, B. C.** (in press). The Healthy Young Men's Cohort: Health, stress and risk profile of Black and Latino young men who have sex with men (YMSM). *Journal of Urban Health*.
60. Kong*, J., Martire, L. M., Tate, A. M., **Bray, B. C.**, & Almeida, D. M. (in press). Different types of childhood experience with mothers and caregiving outcomes in adulthood. *Family Relations*.
59. Surachman*, A., Daw, J., **Bray B. C.**, Alexander, L. M., Coe, C. L., & Almeida D. M. (in press). Heterogeneity of comorbidity among chronic kidney disease risk factors: Association with kidney function and prediction by childhood socioeconomic status. *BMC Nephrology*.
58. Kendall*, A. D., Young, C. B., **Bray, B. C.**, Emerson, E. M., Freels, F., & Donenberg, G. (2020). Changes in externalizing and internalizing symptoms among African-American girls over one year following a mother-daughter sexual health intervention. *Journal of Consulting and Clinical Psychology*. Advance online publication. doi: 10.1037/ccp0000491 PMID: In process
57. LoBraico*, E. J., **Bray, B. C.**, Feinberg, M., & Fosco, G. M. (2020). Constellations of family risk and long-term adolescent antisocial behavior. *Journal of Family Psychology*. Advance online publication. doi: 10.1037/fam0000640 PMID: In process
56. Patrick, M. E., Berglund, P. A., Joshi*, S., & **Bray, B. C.** (2020). A latent class analysis of heavy substance use in young adulthood and impacts on physical, cognitive, and mental health outcomes in middle age. *Drug and Alcohol Dependence*. Advance online publication. doi: 10.1016/j.drugalcdep.2020.108018 PMID: In process
55. Surachman*, A., Rice, C. E., **Bray B. C.**, Gruenewald, T. L., & Almeida D. M. (2020). Association between socioeconomic status mobility and inflammation markers among white and black adults

- in the United States: A latent class analysis. *Psychosomatic Medicine*, 82(2), 224-233. doi: 10.1097/PSY.0000000000000752 PMID: PMC7007866
54. **Bray, B. C.**, Dziak, J. J., & Lanza, S. T. (2019). Age trends in alcohol use behavior patterns among U.S. adults ages 18-65. *Drug and Alcohol Dependence*, 205, 107689. doi: 10.1016/j.drugalcdep.2019.107689 PMID: PMC6957076
 53. **Bray, B. C.**, Dziak, J. J., Patrick, M. E., & Lanza, S. T. (2019). Inverse propensity score weighting with a latent class exposure: Estimating the causal effect of reported reasons for alcohol use on problem alcohol use 16 years later. *Prevention Science*, 20(3), 394-406. doi: 10.1007/s11121-018-0883-8 PMID: PMC6139077
 52. Fitzpatrick, S. L., Brooks, N., Bray, B. C., & Stevens, V. J. (2019). Adherence to behavioral recommendations for weight loss and associated psychosocial factors among African American adults. *Journal of Behavioral Medicine*. Advance online publication. doi: 10.1007/s10865-019-00108-2 PMID: In process
 51. Graupensperger*, S., Benson, A. J., **Bray, B. C.**, & Evans, M. B. (2019). Social cohesion and peer acceptance predict student-athletes' attitudes toward health-risk behaviors: A within- and between-group investigation. *Journal of Science and Medicine in Sport*, 22(12), 1280-1286. doi: 10.1016/j.jsams.2019.07.003 PMID: PMC6825540
 50. Guastaferro, K. M., & **Bray, B. C.** (2019). Substance use and mental health outcomes during emerging adulthood among individuals with different patterns of child maltreatment. *Emerging Adulthood*. Advance online publication. doi: 10.1177/2167696819830481 PMID: In process
 49. Kipke, M. D., Kubicek, K., Wong, C., Robison, Y. A., Akinyemi, D., Beyer, W., ..., Belzer, M. (2019). A focus on the HIV care continuum through the Healthy Young Men's Cohort Study: Protocol for a mixed-methods study. *Journal of Medical Internet Research – Research Protocols*, 8(1), e10738. doi: 10.2196/10738 PMID: PMC6365874
 48. Maas*, M. K., **Bray, B. C.**, & Noll, J. G. (2019). Online sexual experiences predict subsequent sexual health and victimization outcomes among female adolescents: A latent class analysis. *Journal of Youth and Adolescence*, 48(5), 837-849. doi: 10.1007/s10964-019-00995-3 PMID: PMC7135936
 47. Xia*, M., Weymouth*, B. B., **Bray, B. C.**, Lippold, M. A., Feinberg, M. E., & Fosco, G. M. (2019). Exploring influence of triadic family relationship profiles on adolescents' early substance initiation. *Prevention Science*. Advance online publication. doi: 10.1007/s11121-019-01081-7 PMID: In process
 46. **Bray, B. C.**, & Dziak, J. J. (2018). Commentary on latent class, latent profile, and latent transition analysis for characterizing individual differences in learning. *Learning and Individual Differences*, 66, 105-110. doi: 10.1016/j.lindif.2018.06.001 PMC Exempt – Not Peer-Reviewed
 45. Fitzpatrick, S. L., Appel, L. J., **Bray, B. C.**, Brooks, N., & Stevens, V. J. (2018). Predictors of long-term adherence to multiple health behavior recommendations for weight management. *Health Education and Behavior*, 45(6), 997-1007. doi: 10.1177/1090198118757823 PMID: PMC6133769
 44. Jacka*, B., **Bray, B. C.**, Applegate, T. L., Marshall, B. D. L., Lima, V. D., Hayashi, K., ..., Grebely, J. (2018). Drug use and phylogenetic clustering of hepatitis C virus infection among people who use drugs in Vancouver, Canada: A latent class analysis approach. *Journal of Viral Hepatitis*, 25(1), 28-36. doi: 10.1111/jvh.12758 PMID: PMC5743579
 43. Maas*, M. K., **Bray, B. C.**, & Noll, J. G. (2018). A latent class analysis of online sexual experiences and offline sexual behaviors among female adolescents. *Journal of Research on Adolescence*, 28(3), 731-747. doi: 10.1111/jora.12364 PMID: PMC5960611
 42. Perzow*, S. E. D., **Bray, B. C.**, & Wadsworth, M. E. (2018). Financial stress response profiles and psychosocial functioning in low-income parents. *Journal of Family Psychology*, 32(4), 517-527. doi: 10.1037/fam0000403 PMID: PMC5995125
 41. Rivera*, P. M., **Bray, B. C.**, Guastaferro, K. M., Kugler, K. C., & Noll, J. G. (2018). Linking patterns of substance use with sexual risk-taking among female adolescents with and without histories of maltreatment. *Journal of Adolescent Health*, 62(5), 556-562. doi: 10.1016/j.jadohealth.2017.11.293 PMID: PMC5930059

40. Rivera*, P. M., Fincham, F. D., & **Bray, B. C.** (2018). Latent classes of maltreatment: A systematic review and critique. *Child Maltreatment*, 23(1), 3-24. doi: 10.1177/1077559517728125 PMID: PMC5614894
39. **Wang*, D., Hagedorn, A. D., McLaughlin, D. K., & **Bray, B. C.** (2018). Change and stability of emotional health of rural Pennsylvania youth during high school. *Journal of Rural Health*, 34(3), 322-332. doi: 10.1111/jrh.12296 PMID: PMC6021226
38. Kim*, B.-R., Chow, S.-M., **Bray, B. C.**, & Teti, D. M. (2017). Trajectories of mothers' emotional availability: Relations with infant temperament in predicting attachment security. *Attachment and Human Development*, 19(1), 38-57. doi: 10.1080/14616734.2016.1252780 PMID: PMC5598772
37. Linden-Carmichael, A. N., Lanza, S. T., Dziak, J. J., & **Bray, B. C.** (2017). Contemporary alcohol use patterns among a national sample of U.S. adult drinkers. *Journal of Addictive Diseases*, 36(4), 222-226. doi: 10.1080/10550887.2017.1338816 PMID: PMC565624
36. Longo*, G. S., **Bray, B. C.**, & Kim-Spoon, J. (2017). Profiles of adolescent religiousness using latent profile analysis: Implications for psychopathology. *British Journal of Developmental Psychology*, 35(1), 91-105. doi: 10.1111/bjdp.12183 PMID: PMC5531039
35. Patrick, M. E., Terry-McElrath, Y. M., Schulenberg, J. E., & **Bray, B. C.** (2017). Patterns of high-intensity drinking among young adults in the United States: A repeated measures latent class analysis. *Addictive Behaviors*, 74(11), 134-139. doi: 10.1016/j.addbeh.2017.06.004 PMID: PMC5550283
34. Terry-McElrath, Y. M., O'Malley, P. M., Johnston, L. D., **Bray, B. C.**, Patrick, M. E., & Schulenberg, J. E. (2017). Longitudinal patterns of marijuana use across ages 18-50 in a US national sample: A descriptive examination of predictors and health correlates of repeated measures latent class membership. *Drug and Alcohol Dependence*, 171, 70-83. doi: 10.1016/j.drugalcdep.2016.11.021 PMID: PMC5263048
33. Acheson, A., Lake*, S. L., **Bray, B. C.**, Liang, Y., Mathias, C. W., Ryan*, S. R., ... Dougherty, D. M. (2016). Early adolescent trajectories of impulsiveness and sensation seeking in children of fathers with histories of alcohol and other substance use disorders. *Alcoholism: Clinical and Experimental Research*, 40(12), 2622-2630. doi: 10.1111/acer.13235 PMID: PMC5133168
32. **Bray, B. C.**, Smith, R. A., Piper, M. E., Roberts, L. J., & Baker, T. B. (2016). Transitions in smokers' social networks after quit attempts: A latent transition analysis. *Nicotine and Tobacco Research*, 18(12), 2243-2251. doi: 10.1093/ntr/ntw173 PMID: PMC5103938
31. Charles*, N. E., Ryan*, S. R., **Bray, B. C.**, Mathias, C. W., Acheson, A., & Dougherty, D. M. (2016). Altered developmental trajectories for impulsivity and sensation seeking among adolescent substance users. *Addictive Behaviors*, 60, 235-241. doi: 10.1016/j.addbeh.2016.04.016 PMID: PMC4904737
30. Dziak, J. J., **Bray, B. C.**, Zhang*, J.-T., Zhang, M., & Lanza, S. T. (2016). Comparing the performance of improved classify-analyze approaches for distal outcomes in latent profile analysis. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 12(4), 107-116. doi: 10.1027/1614-2241/a000114 PMID: PMC5473653
29. Fosco, G. M., & **Bray, B. C.** (2016). Profiles of cognitive appraisals and triangulation into interparental conflict: Implications for adolescent adjustment. *Journal of Family Psychology*, 30(5), 533-542. doi: 10.1037/fam0000192 PMID: PMC4980208
28. Halliburton*, A. E., & **Bray, B. C.** (2016). Long-term prevalence and demographic trends in U.S. adolescent inhalant use: Implications for clinicians and prevention scientists. *Substance Use and Misuse*, 51(3), 343-356. doi: 10.3109/10826084.2015.1110169 PMC Exempt – Not NIH Funded
27. Patrick, M. E., **Bray, B. C.**, & Berglund, P. A. (2016). Reasons for marijuana use among young adults and long-term associations with marijuana use and problems. *Journal of Studies on Alcohol and Drugs*, 77(6), 881-888. doi: 10.15288/jsad.2016.77.881 PMID: PMC5088171
26. Willner*, C. J., Gatzke-Kopp, L. M., & **Bray, B. C.** (2016). The dynamics of internalizing and externalizing comorbidity across the early school years. *Development and Psychopathology*, 28(4pt1), 1033-1052. doi:10.1017/S0954579416000687 PMID: PMC5319409

25. **Bray, B. C.**, Lanza, S. T., & Tan, X. (2015). Eliminating bias in classify-analyze approaches for latent class analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 22(1), 1-11. doi: 10.1080/10705511.2014.935265 PMID: PMC4299667
24. Charles*, N. E., Mathias, C. W., Acheson, A., **Bray, B. C.**, Ryan*, S. R., Lake*, S. L., ... Dougherty, D. M. (2015). Increased pre- and early-adolescent stress in youth with a family history of substance use disorder and early substance use initiation. *Journal of Youth and Adolescence*, 44(10), 1954-1967. doi: 10.1007/s10964-015-0271-7 PMID: PMC4565755
23. Dougherty, D. M., Lake*, S. L., Mathias, C. W., Ryan*, S. R., **Bray, B. C.**, Charles*, N. E., & Acheson, A. (2015). Behavioral impulsivity and risk-taking trajectories across early adolescence in youth with and without family histories of substance use disorder. *Alcoholism: Clinical and Experimental Research*, 39(8), 1501-1509. doi: 10.1111/acer.12787 PMID: PMC4630668
22. Ridenour, T. A., Halliburton*, A., & **Bray, B. C.** (2015). Does DSM-5 nomenclature for inhalant use disorder improve upon DSM-IV? *Psychology of Addictive Behaviors*, 29(1), 211-217. doi: 10.1037/adb0000007 PMID: PMC4333138
21. Zhang*, J.-T., **Bray, B. C.**, Zhang, M., & Lanza, S. T. (2015). Personality profiles and frequent heavy drinking in young adulthood. *Personality and Individual Differences*, 80, 18-21. doi: 10.1016/j.paid.2015.01.054 PMID: PMC4397499
20. Acheson, A., Wijtenburg, S. A., Rowland, L. M., **Bray, B. C.**, Gaston, F., Mathias, C. W., ... Dougherty, D. M. (2014). Combining diffusion tensor imaging and magnetic resonance spectroscopy to study reduced frontal white matter integrity in youths with family histories of substance use disorders. *Human Brain Mapping*, 35(12), 5877-5887. doi: 10.1002/hbm.22591 PMID: PMC4219410
19. **Bray, B. C.**, Foti, R. J., Thompson*, N. J., & Wills*, S. F. (2014). Disentangling the effects of self leader perceptions and ideal leader prototypes on leader judgments using loglinear modeling with latent variables. *Human Performance*, 27(5), 393-415. doi: 10.1080/08959285.2014.956176 PMC Exempt – Not NIH Funded
18. **Bray, B. C.**, Lee*, G. P., Liu, W., Storr, C. L., Ialongo, N. S., & Martins, S. S. (2014). Transitions in gambling participation during late adolescence and young adulthood. *Journal of Adolescent Health*, 55(2), 188-194. doi: 10.1016/j.jadohealth.2014.02.001 PMID: PMC4108554
17. Lanza, S. T., Cooper, B. R., & **Bray, B. C.** (2014). Population heterogeneity in the salience of multiple risk factors for adolescent delinquency. *Journal of Adolescent Health*, 54(3), 319-325. doi: 10.1016/j.jadohealth.2013.09.007 PMID: PMC3943167
16. James, L. M., Mathias, C. W., **Bray, B. C.**, Cates, S. E., Farris, S. J., Dawes, M. A., ... Dougherty, D. M. (2013). Acquisition of rater agreement for the Stressful Life Events Schedule. *Journal of Alcoholism and Drug Dependence*, 1(5), 1-5. doi: 10.4172/2329-6488.10000124 PMC Exempt – Open Access
15. Lanza, S. T., Tan, X., & **Bray, B. C.** (2013). Latent class analysis with distal outcomes: A flexible model-based approach. *Structural Equation Modeling: A Multidisciplinary Journal*, 20(1), 1-26. doi: 10.1080/10705511.2013.742377 PMID: PMC4240499
14. Smith*, R. C., Coyle*, P. T., Baldner*, C., **Bray, B. C.**, & Geller, E. S. (2013). A field investigation of perceived behavioral control and blood alcohol content: A pattern-oriented approach. *Addictive Behaviors*, 38(4), 2080-2083. doi: 10.1016/j.addbeh.2013.01.003 PMC Exempt – Not NIH Funded
13. Foti, R. J., **Bray, B. C.**, Thompson*, N. J., & Allgood*, S. F. (2012). Know thy self, know thy leader: Contributions of a pattern-oriented approach to examining leader perceptions. *The Leadership Quarterly*, 23(4), 702-717. doi: 10.1016/j.leaqua.2012.03.007 PMC Exempt – Not NIH Funded
12. Tisminetzky*, M., **Bray, B. C.**, Miozzo, R., Aupont, O., & McLaughlin, T. J. (2012). Classes of depression, anxiety and functioning in acute coronary syndrome patients. *American Journal of Health Behavior*, 36(1), 20-30. doi: 10.5993/AJHB.36.1.3 PMID: PMC3704170
11. White, S. W., **Bray, B. C.**, & Ollendick, T. H. (2012). Examining shared and unique aspects of social anxiety disorder and autism spectrum disorder using factor analysis. *Journal of Autism and Developmental Disorders*, 42(5), 874-884. doi: 10.1007/s10803-011-1325-7 PMC Exempt – Not NIH Funded

10. Mathias, C. W., Blumenthal, T. D., Dawes, M. A., Liguori, A., Richard, D. M., **Bray, B. C.**, ... Dougherty, D. M. (2011). Failure to sustain prepulse inhibition in adolescent marijuana users. *Drug and Alcohol Dependence*, 116(1-3), 110-116. doi: 10.1016/j.drugalcdep.2010.11.020 PMID: PMC3091950
9. Tisminetzky*, M., **Bray, B. C.**, Miozzo, R., Aupont, O., & McLaughlin, T. J. (2011). Identifying symptom profiles of depression and anxiety in patients with an acute coronary syndrome using latent class and latent transition analysis. *The International Journal of Psychiatry in Medicine*, 42(2), 195-210. doi: 10.2190/PM.42.2.g PMID: PMC3712857
8. White, S. W., Ollendick, T. H., & **Bray, B. C.** (2011). College students on the autism spectrum: Prevalence and associated problems. *Autism*, 15(6), 683-701. doi: 10.1177/1362361310393363 PMC Exempt – Not NIH Funded
7. **Bray, B. C.**, Lanza, S. T., & Collins, L. M. (2010). Modeling relations among discrete developmental processes: A general approach to associative latent transition analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 17(4), 541-569. doi: 10.1080/10705511.2010.510043 PMID: PMC3094019
6. **Davidson, J. E., Irizarry, M. C., **Bray, B. C.**, Wetten, S., Galwey, N., Gibson, R., ... Monsch, A. U. (2010). An exploration of cognitive subgroups in Alzheimer's Disease. *Journal of the International Neuropsychological Society*, 16(2), 233-243. doi: 10.1017/S1355617709991160 PMID: PMC2903844
5. Lanza, S. T., & **Bray, B. C.** (2010). Transitions in drug use among high-risk women: An application of latent class and latent transition analysis. *Advances and Applications in Statistical Sciences*, 3(2), 203-236. PMID: PMC3171700
4. **Koukounari, A., Webster, J. P., Donnelly, C. A., **Bray, B. C.**, Naples, J., Bosompem, K., ... Shiff, C. (2009). Sensitivities and specificities of diagnostic tests and infection prevalence of *Schistosoma haematobium* estimated from data on adults in villages northwest of Accra, Ghana. *American Journal of Tropical Medicine and Hygiene*, 80(3), 435-441. PMID: PMC2726788
3. White, H. R., **Bray, B. C.**, Fleming, C. B., & Catalano, R. F. (2009). Transitions into and out of light and intermittent smoking from adolescence into emerging adulthood. *Nicotine and Tobacco Research*, 11(2), 211-219. doi: 10.1093/ntr/ntn017 PMID: PMC2658905
2. Ridenour, T. A., **Bray, B. C.**, & Cottler, L. B. (2007). Reliability of use, abuse, and dependence of four types of inhalants in adolescents and young adults. *Drug and Alcohol Dependence*, 91(1), 40-49. doi:10.1016/j.drugalcdep.2007.05.004 PMID: PMC2040516
1. **Bray, B. C.**, Almirall, D., Zimmerman, R. S., Lynam, D., & Murphy, S. A. (2006). Assessing the total effect of time-varying predictors in prevention research. *Prevention Science*, 7(1), 1-17. doi: 10.1007/s11121-005-0023-0 PMID: PMC1479302

Under Review

- Higuchi*, C. H., Fonseca, L., **Bray, B. C.**, Cogo-Moreira, H., Okuda, P., Ortiz, B. B., ... Gadelha, A. (2019). The positive and negative syndrome scale (PANSS) as a group profile generator in Schizophrenia. Manuscript submitted for publication. [*Schizophrenia Research*]
- Lydon-Staley*, D. M., LoBraico*, E. J., **Bray, B. C.**, & Fosco, G. M. (2019). Conceptualizing the family context: Constellations of dispositional and family cohesion and conflict. Revised manuscript submitted for publication. [*Journal of Family Psychology*]
- Weymouth*, B. B., Fosco, G. M., **Bray, B. C.**, & Feinberg, M. E. (2019). A latent profile analysis of co-occurring social anxiety symptoms and antisocial behavior: Implications for adolescent substance use. Revised manuscript submitted for publication. [*Journal of Research on Adolescence*]

Under Revision

- Layland*, E. K., **Bray, B. C.**, & Kipke, M. D. (2019). Global and group-specific effects of stressful events and discrimination on substance use among young men of color who have sex with men. [new journal: *Nicotine and Tobacco Research*]
- Maldonado-Molina, M. M., **Bray, B. C.**, LoBraico*, E. J., Estrada, Y., & Prado, G. (2018). Profiles of parental acculturation and stress on family-related communication and youth substance use initiation among Hispanic families. [new journal: *Family and Community Health*]

Under Contract

- Bray, B. C.**, Collins, L. M., & Lanza, S. T. (in preparation). *Latent class and latent transition analysis: With applications in the social, behavioral, and health sciences* (Second Edition). Hoboken, NJ: John Wiley & Sons.

By Invitation

- Bray, B. C.**, Berglund, P. A., Evans-Polce, R. J., & Patrick, M. E. (in preparation). A latent transition analysis of self-reported reasons for marijuana use during young adulthood. Special issue of *Evaluation and The Health Professions*.
- Bray, B. C.**, Layland*, E. K., & Lanza, S. T. (in preparation). Estimating the effects of a complex, multidimensional moderator: An example of latent class moderation to examine differential intervention effects of drug abuse services. Special issue of *Prevention Science*.

Book Chapters

3. Lanza, S. T., Schuler*, M. S., & **Bray, B. C.** (2016). Latent class analysis with causal inference: The effect of adolescent depression on young adult substance use profile (Chp. 16, pp. 385-404). In W. Wiedermann & A. von Eye (Eds.), *Causality and Statistics*. Hoboken, NJ: Wiley.
2. Lanza, S. T., **Bray, B. C.**, & Collins, L. M. (2013). An introduction to latent class and latent transition analysis. In J. A. Schinka, W. F. Velicer, & I. B. Weiner (Eds.), *Handbook of psychology* (2nd ed., Vol. 2, pp. 691-716). Hoboken, NJ: Wiley.
1. Ridenour, T. A., **Bray, B. C.**, Scott, H. S., & Cottler, L. B. (2008). Classification and assessment of substance use disorders in adolescents. In C. A. Essau (Ed.), *Adolescent addiction: Epidemiology, assessment, and treatment (Practical resources for the mental health professional)* (pp. 17-57). Burlington, MA: Academic Press.

Other Publications

- Bray, B. C.**, Lanza, S. T., & Tan, X. (2012). *An introduction to eliminating bias in classify-analyze approaches for latent class analysis* (Tech. Rep. No. 12-118). University Park, PA: The Methodology Center, The Pennsylvania State University.
- Lanza, S. T., Tan, X., & **Bray, B. C.** (2011). A technical introduction: A model-based approach to latent class analysis with distal outcomes (Tech. Rep. No. 11-116). University Park, PA: The Methodology Center, The Pennsylvania State University.
- Bray, B. C.** (2008). *Dissertation executive summary for "Examining gambling and substance use: Applications of advanced latent class modeling techniques for cross-sectional and longitudinal data"* (Tech. Rep. No. 08-88). University Park, PA: The Methodology Center, The Pennsylvania State University.
- Bray, B. C.** (2005). *Modeling the development of substance use and delinquency simultaneously: An associative latent transition analysis example* (Tech. Rep. No. 05-72). University Park, PA: The Methodology Center, The Pennsylvania State University.
- Bray, B. C.**, Zimmerman, R. S., Lynam, D., & Murphy, S. A. (2003). *Assessing the total effect of time-varying predictors in prevention research* (Tech. Rep. No. 03-59). University Park, PA: The Methodology Center, The Pennsylvania State University.
- Wong, P., McAuslan, P., & **Bray, B. C.** (2000). *Survey of problem gambling in the Metropolitan Detroit Area, 2000*. Conducted under contract for the United Way Community Services.

Software

- Dziak, J. J., **Bray, B. C.**, & Wagner, A. T. (2020). *LCA_Covariates_3Step SAS macro users' guide* (Version 1.0). University Park, PA: The Methodology Center, Penn State. Retrieved from <http://methodology.psu.edu>
- Dziak, J. J., **Bray, B. C.**, & Wagner, A. T. (2017). *LCA_Distal_BCH SAS macro users' guide* (Version 1.1). University Park: The Methodology Center, Penn State. Retrieved from <http://methodology.psu.edu>
- Dziak, J. J., Yang, J., Tan, X., **Bray, B. C.**, Wagner, A. T., & Lanza, S. T. (2017). *LCA_Distal_LTB SAS macro users' guide* (Version 1.1). University Park: The Methodology Center, Penn State. Retrieved from <http://methodology.psu.edu>
- Huang, L., Dziak, J. J., **Bray, B. C.**, & Wagner, A. T. (2017). *LCA_Distal_BCH Stata function users' guide* (Version 1.1). University Park: The Methodology Center, Penn State. Retrieved from <http://methodology.psu.edu>
- Huang, L., Dziak, J. J., **Bray, B. C.**, Wagner, A. T., & Lanza, S. T. (2017). *LCA_Distal_LTB Stata function users' guide* (Version 1.0). University Park: The Methodology Center, Penn State. Retrieved from <http://methodology.psu.edu>
- Dziak, J. D., Yang, J., Tan, X., **Bray, B. C.**, Wagner, A. T., & Lanza, S. T. (2015). *LCA distal SAS macro users' guide* (Version 3.0). University Park, PA: The Methodology Center, Penn State. Retrieved from <http://methodology.psu.edu/downloads/distal> [retired software product]

Presentations

- *** Denotes invited presentation
 ** Denotes organized symposium
 * Denotes graduate student, or post-doctoral or other fellow

Presented Internationally

- (under review) Kubicek, K., **Bray, B. C.**, Bolton, A., Wu, S., & Kipke, M. D. (2020, November). Consistent and inconsistent use of PrEP among young men who have sex with men: A mixed methods study. Poster presented at the 15th International Conference on HIV Treatment and Prevention Adherence, Orlando, FL.
- Kubicek, K., **Bray, B. C.**, Bolton, A., Wu, S., & Kipke, M. D. (2020, July). A mixed methods study to examine discontinuation of PrEP among young men of color who have sex with men (YMSM). Poster presented at the 23rd International AIDS Conference, virtual: www.aids2020.org.
- Surachman*, A., **Bray, B. C.**, Alexander, L. M., Coe, C. L., & Almeida, D. M. (2019, April). *Latent classes of chronic kidney disease risk factors among adults in the Midlife in the United States (MIDUS) study: Socioeconomic covariates and association with eGFR*. Poster presented at the International Society of Nephrology World Congress of Nephrology, Melbourne, Australia.
- Higuchi*, C. H., Cogo-Moreira, H., Ortiz, B., Correll, C., Noto, C., Okuda, P., ..., Gadelha, A. (2019, April). *Exploring new approaches to parse the clinical heterogeneity in schizophrenia by structure equation modeling*. Paper presented at the 2019 Congress of the Schizophrenia International Research Society, Orlando, FL.
- Koutoumanou, E. Batterham, M., & **Bray, B. C.** (2018, July). *Statistics education in the workplace*. Panel discussion presented at the 10th International Conference on Teaching Statistics, Kyoto, Japan.
- Hung*, Y. W., **Bray, B. C.**, & Maggs, J. L. (2018, March). *Understanding childhood risk factors for patterns of distress, alcohol use, and smoking in adulthood*. Paper presented at the NCDS 60 Years of Our Lives Conference, Centre for Longitudinal Studies, London, England.
- *****Bray, B. C.** (2017, November). *The Methodology Center at Penn State & our ongoing mixture modeling research*. Brown bag seminar presented at the Methodology & Statistics Unit, Institute of Psychology, Leiden University, Leiden, Netherlands.
- Fitzpatrick, S. L., Brooks, N., **Bray, B. C.**, Stevens, V. J. (2017, June). *Non-adherence to behavioral recommendations is associated with suboptimal psychological well-being among African Americans*. Poster presented at the 8th International Conference on Health Psychology, Havana, Cuba.

- Bray, B. C.** (2016, October). *An introduction to latent class analysis for prevention research: Identifying high-risk subgroups in the population*. Workshop presented at the European Society for Prevention Research 7th Annual Conference and Members' Meeting, Berlin, Germany.
- *****Bray, B. C.** (2016, May). *My experience as a woman in mathematics and statistics*. Discussion presented at the Women in Mathematics Day: Ireland at the Mathematics Applications Consortium for Science and Industry, University of Limerick, Limerick, Ireland.
- *****Bray, B. C.** (2016, May). *Cutting-edge advances in latent class analysis for today's behavioral scientists*. Keynote paper presented at the Irish Statistical Association's 36th Conference on Applied Statistics in Ireland at the Department of Mathematics and Statistics, University of Limerick, Limerick, Ireland.
- *****Bray, B. C.** (2016, May). *Latent class analysis for uncovering hidden population subgroups*. Workshop presented at the Irish Statistical Association's 36th Conference on Applied Statistics in Ireland at the Department of Mathematics and Statistics, University of Limerick, Limerick, Ireland.
- *****Bray, B. C.** (2014, November). *Latent profile analysis: A step-by-step primer*. Workshop presented for the Leadership Seminar Series at the Business School of Durham University, Durham, England.
- *****Bray, B. C., & Foti, R. J.** (2014, November). *A brief introduction to latent profile analysis in leadership research*. Paper presented for the Leadership Seminar Series at the Business School of Durham University, Durham, England.
- *****Bray, B. C.** (2014, July). *A practical guide to causal inference with propensity scores*. Workshop presented at the School of Public Health, Xi'an Jiaotong University, Xi'an, China.
- *****Bray, B. C.** (2014, July). *An introduction to latent class analysis*. Workshop presented at the School of Public Health, Xi'an Jiaotong University, Xi'an, China.
- *****Bray, B. C.** (2014, July). *A practical guide to causal inference with propensity scores*. Workshop presented at the School of Psychology, South China Normal University, Guangzhou, China.
- *****Bray, B. C.** (2014, July). *An introduction to latent class analysis*. Workshop presented at the School of Psychology, South China Normal University, Guangzhou, China.
- *****Bray, B. C.** (2014, June). *An introduction to latent class and latent transition analysis*. Workshop presented at the Guanghua School of Management, Center for Statistical Science and School of Mathematical Sciences, Peking University, Beijing, China.
- ***Lanza, S. T., & **Bray, B. C.** (2014, May). *Integrating propensity scores with latent class analysis to identify determinants of class membership*. Paper presented at the Statistics and Causality Conference, Vienna, Austria.
- ***Collins, L. M., Lanza, S. T., & **Bray, B. C.** (2008, September). *Masterclass: Latent class analysis for cross-sectional and longitudinal data*. Department of Mathematics and Statistics Postgraduate Statistics Centre of Lancaster University and the Economic and Social Research Council National Centre for Research Methods: Lancaster, England.
- ***Collins, L. M., Lanza, S. T., & **Bray, B. C.** (2007, February). *ZA spring seminar, topics in advanced categorical data analysis (CDA): Latent class analysis for cross-sectional and longitudinal data*. The University of Cologne: Cologne, Germany.
- Bray, B. C.** (2004, June). *Spatial distribution of poverty in Michigan counties, 1990 Census data*. Poster presented at the 7th International Summer Institute on Developmental Science, Jyväskylä, Finland.

Presented Nationally

- (under review) Layland*, E. K., **Bray, B. C.**, & Kipke, M. D. (2020, October). *Sexual racism and body image concerns over time among Black and Latino sexual minority men*. Poster presentation at the American Public Health Association Annual Meeting, San Francisco, CA.
- Van Doren*, N., Linden-Carmichael, A. N., **Bray, B. C.**, Lanza, S. T. (2020, June). *Examining daily patterns of substance use in young adults and their relation to daily stress and negative affect: An application of latent class analysis to daily diary data*. Poster presented at the Modern Modeling Methods (M3) Conference, Storrs, CT. [conference cancelled due to COVID-19]

- **Bray, B. C., & Marsiglia, F. F. (2020, May).** *Increasing health equity for diverse populations: Place-based etiology, intervention, and implementation.* Paper symposium presented at the Society for Prevention Research 28th Annual Meeting: "Why Context Matters: Towards a Place-Based Prevention Science," Washington, DC. [parts of conference cancelled due to COVID-19]
- **Herman, K. C., & Bray, B. C. (2020, May).** *Advances in analyzing categorical data.* Paper symposium presented at the Society for Prevention Research 28th Annual Meeting: "Why Context Matters: Towards a Place-Based Prevention Science," Washington, DC. [parts of conference cancelled due to COVID-19]
- LoBraico*, E. J., Fosco, G. M., **Bray, B. C., & Feinberg, M. (2020, May).** *Patterns of engagement in the Strengthening Families Program: For Parents and Youth Ages 10-14.* Paper presented at the Society for Prevention Research 28th Annual Meeting: "Why Context Matters: Towards a Place-Based Prevention Science," Washington, DC. [parts of conference cancelled due to COVID-19]
- Layland*, E. K., **Bray, B. C., & Kipke, M. D. (2020, April).** *Experiences and health correlates of discrimination are not universal: Stress, racism, and homonegativity as determinants of drug use among diverse sexual minority men.* Paper presentation at the Society for Behavioral Medicine Annual Meeting, San Francisco, CA. [conference cancelled due to COVID-19]
- Perzow*, S. E. D., **Bray, B. C., Wadsworth, M. E., & Hankin, B. L. (2020, March).** *Individual differences in adolescent coping across contexts.* Paper presentation at the Society for Research on Adolescence Annual Meeting, San Diego, CA. [conference cancelled due to COVID-19]
- Xia*, M., Fosco, G. M., & **Bray, B. C. (2020, March).** *Triadic family relationship dynamics and adolescent well-being.* Paper presentation at the Society for Research on Adolescence Annual Meeting, San Diego, CA. [conference cancelled due to COVID-19]
- ***Lanza, S. T., & Bray, B. C. (2019, December).** *Latent class analysis.* Workshop presented for Statistical Horizons, Philadelphia, PA.
- ***Bray, B. C. (2019, November).** *Latent class analysis.* Workshop presented at the Institute for Translational Research in Children's Mental Health, University of Minnesota, Minneapolis, MN.
- ***Bray, B. C. (2019, November).** *Advancing intervention science and promoting health equity using innovative quantitative methods.* Paper presented at the Institute for Translational Research in Children's Mental Health, University of Minnesota, Minneapolis, MN.
- ***Bray, B. C. (2019, November).** *Innovative design and analysis tools for optimizing behavioral interventions: Understanding heterogeneity to achieve health equity.* Paper presented at the American Heart Association Scientific Sessions 2019, Philadelphia, PA.
- Layland*, E. K., Kipke, M. D., **Bray, B. C., & Kubicek, K. (2019, May).** *Unpacking the effects of stress and discrimination on substance use: Similarities and differences among Latino, Black, and Multi-Racial/Ethnic young men who have sex with men.* Poster presented at the 2019 National LGBTQ Health Conference: "Bridging Research and Practice," Atlanta, GA.
- Bray, B. C., Dziak, J. J., & Lanza, S. T. (2019, May).** *Combining latent class analysis with time-varying effect modeling: Understanding the epidemiology of alcohol use.* Paper presented at the Society for Prevention Research 27th Annual Meeting: "Prevention Science in a Big Data World," San Francisco, CA.
- **Bray, B. C., & Witkiewitz, K. (2019, May).** *Applying latent class models in prevention science: Practical solutions to everyday problems.* Organized paper symposium presented at the Society for Prevention Research 27th Annual Meeting: "Prevention Science in a Big Data World," San Francisco, CA.
- Dziak, J. J., & **Bray, B. C. (2019, May).** *Multiple imputation of missing covariate information in latent class analysis: Evaluation of a step-by-step approach.* Paper presented at the Society for Prevention Research 27th Annual Meeting: "Prevention Science in a Big Data World," San Francisco, CA.
- Layland*, E. K., **Bray, B. C., Kubicek, K., Bhandari, S., & Kipke, M. D. (2019, May).** *Drug use patterns among young men of color who have sex with men.* Poster presented at the Society for Prevention Research 27th Annual Meeting: "Prevention Science in a Big Data World," San Francisco, CA.

- LoBraico*, E. J., **Bray, B. C.**, Fosco, G. M., & Feinberg, M. (2019, May). *Constellations of family risk and long-term adolescent antisocial behavior: A latent profile analysis*. Paper presented at the Society for Prevention Research 27th Annual Meeting: "Prevention Science in a Big Data World," San Francisco, CA.
- Xia*, M., **Bray, B. C.**, & Fosco, G. M. (2019, May). *Using multilevel latent profile analysis for daily diary data: Understanding the dynamics of mother-father-adolescent triadic relationships*. Paper presented at the Society for Prevention Research 27th Annual Meeting: "Prevention Science in a Big Data World," San Francisco, CA.
- Van Doren*, N., Layland*, E. K., & **Bray, B. C.** (2019, May). *Coping with racial discrimination: Person-centered coping profiles moderate the association between daily discrimination and depressive and anxious symptoms in African Americans*. Poster presented at the Association for Psychological Science 31st Annual Convention, Washington, DC.
- Weymouth*, B. B., Fosco, G. M., **Bray, B. C.**, & Feinberg, M. E. (2019, March). *Sequence of co-occurring social anxiety and antisocial behavior during early adolescence: A latent transition analysis*. Poster presented at the 2019 Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.
- Xia*, M., Fosco, G. M., & **Bray, B. C.** (2019, March). *Profiles of family relationship dynamics: Associations with adolescent flourishing*. Paper presented at the 2019 Biennial Meeting of the Society for Research in Child Development, Baltimore, MD.
- Surachman*, A., **Bray, B. C.**, Gruenewald, T. L., & Almeida, D. M. (2018, November). *Rags to rags, riches to riches: Socioeconomic mobility and psychobiological mediators of SES-health association*. Paper presented at the Gerontological Society of America Annual Scientific Meeting, Boston, MA.
- Rivera*, P. M., **Bray, B. C.**, Kugler, K. C., Guastaferrero, K., & Noll, J. G. (2018, November). *Linking patterns of substance use with sexual risk-taking among female adolescents with and without histories of maltreatment*. Poster presented at the annual meeting of the American Association for Marriage and Family Therapy, Louisville, KY.
- *****Bray, B. C.** (2018, September). *An introduction to latent class and latent profile analysis*. Workshop presented at the Department of Family Studies and Human Development, The University of Arizona, Tucson, AZ.
- *****Bray, B. C.** (2018, September). *Increasing health equity using innovative design and analysis tools from The Methodology Center at Penn State*. Paper presented at the Minority Affairs Workshop, American College of Epidemiology, Cincinnati, OH.
- Bray, B. C.**, Dziak, J. J., Patrick, M. E., & Lanza, S. T. (2018, June). *Causal analysis with latent class exposures using inverse propensity scores and BCH adjustment*. Poster presented at the 7th Annual Thomas R. Ten Have Symposium on Statistics in Mental Health, Chicago, IL.
- Bray, B. C.**, & Liu, M. (2018, June). *Discussion of "mediation analysis with censored time-to-event mediator"*. Paper presented at the 7th Annual Thomas R. Ten Have Symposium on Statistics in Mental Health, Chicago, IL.
- Chilenski, S. M., Prado, G., Etz, K., **Bray, B. C.**, Knapp, A. A. (2018, May). *Hot off the press! SPR training needs assessment findings: Dissemination and discussion around the reported training needs of SPR members*. Roundtable panel discussion presented at the Society for Prevention Research 26th Annual Meeting: "Optimizing the Relevance of Prevention Science to Systems," Washington, DC.
- LoBraico*, E. J., **Bray, B. C.**, Fosco, G. M., Feinberg, M., Spoth, R., & Redmond, C. (2018, May). *Profiles of risk among enrollees in the Strengthening Families Program: For Parents and Youth Ages 10-14*. Poster presented at the Society for Prevention Research 26th Annual Meeting: "Optimizing the Relevance of Prevention Science to Systems," Washington, DC.
- Xia*, M., Weymouth*, B. B., **Bray, B. C.**, Lippod, M. A., Feinberg, M. E., & Fosco, G. M. (2018, May). *Exploring influence of triadic family relationship profiles on adolescents' early substance initiation*. Poster presented at the Society for Prevention Research 26th Annual Meeting: "Optimizing the Relevance of Prevention Science to Systems," Washington, DC.

- Xia*, M., Fosco, G. M., & **Bray, B. C.** (2018, April). *Triadic dance on a daily basis: Profiles of mother-father-adolescent triadic relationship forms and dynamics*. Poster presentation at the Society for Research on Adolescence Biennial Meeting, Minneapolis, MN.
- Weymouth*, B. B., Fosco, G.M., **Bray, B. C.**, & Feinberg, M. E. (2018, April). *A latent profile analysis of co-occurring social anxiety and antisocial behavior: Implications for youth substance use initiation*. Poster presentation at the Society for Research on Adolescence Biennial Meeting, Minneapolis, MN.
- Surachman*, A., Gruenewald, T. L., **Bray, B. C.**, & Almeida, D. M. (2018, March). *Life course socioeconomic status and markers of inflammation in adulthood: A latent class analysis approach*. Paper presented at the American Psychosomatic Society 76th Annual Scientific Meeting, Louisville, KY.
- *****Bray, B. C.** (2018, February). *An introduction to latent class, latent profile, and latent transition analysis*. Workshop presented at the Educational Psychology, Measurement, and Evaluation Program, University of Louisville, Louisville, KY.
- Jacka*, B., **Bray, B. C.**, Applegate, T. L., Marshall, B. D. L., Lima, V. D., Hayashi, K., ..., Grebely, J. (2017, September). *Hepatitis C virus phylogenetic clustering and latent class analysis of drug use among people who use drugs in Vancouver, Canada*. Paper presented at the 6th International Symposium on Hepatitis Care in Substance Users, Jersey City, NJ.
- Terry-McElrath, Y. M., Patrick, M. E., Schulenberg, J. E., & **Bray, B. C.** (2017, June). *Patterns of high-intensity drinking from ages 18 to 25/26: A U.S. national young adult sample*. Poster presented at the Research Society on Alcoholism 40th Annual Scientific Meeting, Denver, CO.
- ****Bray, B. C.**, & White, H. R. (2017, May). *Understanding alcohol, marijuana and e-cigarette use during emerging adulthood: New contributions of person-centered approaches*. Organized paper symposium presented at the Society for Prevention Research 25th Annual Meeting: "Prevention and Public Systems of Care: Research, Policy and Practice," Washington, DC.
- Bray, B. C.**, Berglund, P. A., & Patrick, M. E. (2017, May). *Transitions in marijuana use and patterns of reasons for use during young adulthood*. Paper presented at the Society for Prevention Research 25th Annual Meeting: "Prevention and Public Systems of Care: Research, Policy and Practice," Washington, DC.
- Guastaferrero*, K. M., & **Bray, B. C.** (2017, May). *Examining patterns of childhood maltreatment history and adulthood mental health and substance use outcomes*. Poster presented at the Society for Prevention Research 25th Annual Meeting: "Prevention and Public Systems of Care: Research, Policy and Practice," Washington, DC.
- Maldonado-Molina, M. M., **Bray, B. C.**, Estrada, Y., & Prado, G. (2017, May). *Profiles of parental acculturation and stress and effects on family cohesion, communication and positive parenting among Hispanics*. Poster presented at the Society for Prevention Research 25th Annual Meeting: "Prevention and Public Systems of Care: Research, Policy and Practice," Washington, DC.
- Perzow*, S. E., **Bray, B. C.**, & Wadsworth, M. E. (2017, May). *Stress response profiles and behavioral functioning among low-income parents*. Paper presented at the Society for Prevention Research 25th Annual Meeting: "Prevention and Public Systems of Care: Research, Policy and Practice," Washington, DC.
- Rivera*, P. M., **Bray, B. C.**, Guastaferrero*, K. M., & Fincham, F. D. (2017, May). *Linking childhood maltreatment to patterns of adolescent substance use*. Poster presented at the Society for Prevention Research 25th Annual Meeting: "Prevention and Public Systems of Care: Research, Policy and Practice," Washington, DC.
- *****Bray, B. C.** (2017, April). *An introduction to latent class, latent profile, and latent transition analysis*. Workshop presented at the College of Public Health and Human Sciences, Oregon State University, Corvallis, OR.
- *****Bray, B. C.** (2016, November). *Transitions in smokers' social networks after quit attempts and implications for cessation intervention: Results from a center-to-center collaboration*. Paper presented at the Division of Epidemiology, Prevention, and Services Research Seminar, National Institute on Drug Abuse, National Institutes of Health, Bethesda, MD.

- Tucker-Seeley, R. D., McKay*, A. S., Boulanger, V., & **Bray, B. C.** (2016, October). *Expanding our notion of neighborhood socioeconomic status: Mix of neighborhood retail/service types as an indicator of neighborhood socioeconomic context*. Paper presented at the Annual Meeting and Exposition of the American Public Health Association: "Creating the Healthiest Nation: Ensuring the Right to Health," Denver, CO.
- Bray, B. C.** (2016, September). *Gambling and polysubstance use behavior patterns: Using latent class analysis to examine the syndromal model of addiction*. Poster presented at the National Center for Responsible Gaming 17th Annual Conference on Gambling and Addiction, Las Vegas, NV. [Honorable Mention]
- **Baraldi, A. N., & **Bray, B. C.** (2016, June). *Three m's in prevention research: Mediation, multilevel modeling, and missing data*. Organized paper symposium presented at the Society for Prevention Research 24th Annual Meeting: "Using Prevention Science to Promote Health Equity and Improve Well-Being," San Francisco, CA.
- Bray, B. C.** (2016, June). *Gambling and polysubstance use behavior patterns: Using latent class analysis to examine the syndromal model of addiction*. Poster presented at the Society for Prevention Research 24th Annual Meeting: "Using Prevention Science to Promote Health Equity and Improve Well-Being," San Francisco, CA.
- Bray, B. C.**, Berglund, P. A., & Patrick, M. E. (2016, June). *Motivations for marijuana use among young adults in the U.S.* Poster presented at the Society for Prevention Research 24th Annual Meeting: "Using Prevention Science to Promote Health Equity and Improve Well-Being," San Francisco, CA.
- Willner*, C. J., Gatzke-Kopp, L. M., & **Bray, B. C.** (2016, March). *Electrophysiological indices of social threat processing biases in children with internalizing, externalizing, and comorbid symptoms*. Poster presented at the 2016 annual conference of the Society for Affective Science, Chicago, IL.
- ***Lanza, S. T., & **Bray, B. C.** (2016, January). *Latent class, latent profile, and latent transition analysis*. Workshop presented at the Latino Resilience Enterprise, T. Denny Sanford School of Social and Family Dynamics, Arizona State University, Tempe, AZ.
- Willner*, C. J., Gatzke-Kopp, L. M., & **Bray, B. C.** (2015, October). *Do automatic or controlled social threat processing biases predict children's internalizing and externalizing symptom profiles?* Poster presented at the 2015 Developmental Affective Neuroscience Symposium, Department of Psychiatry, University of Pittsburgh, Pittsburgh, PA.
- ****Bray, B. C.**, & Hill, L. G. (2015, May). *State-of-the-art approaches to latent class analysis with distal outcomes: Recommendations for today's prevention scientists*. Organized paper symposium presented at the Society for Prevention Research 23rd Annual Meeting: "Integrating Prevention Science and Public Policy," Washington, DC.
- Lanza, S. T., **Bray, B. C.**, & Dziak, J. J. (2015, May). *Comparing three approaches to latent class analysis with distal outcomes: A scientific summary*. Paper presented at the Society for Prevention Research 23rd Annual Meeting: "Integrating Prevention Science and Public Policy," Washington, DC.
- Zhang*, J., Dziak, J. J., **Bray, B. C.**, Lanza, S. T., & Zhang, M. (2015, May). *Extending latent class analysis with distal outcomes: Recommendations for adding control variables and moderators*. Paper presented at the Society for Prevention Research 23rd Annual Meeting: "Integrating Prevention Science and Public Policy," Washington, DC.
- Bray, B. C.**, Lanza, S. T., & Coffman, D. L. (2015, May). *Estimating causal effects with latent class variables: Exposures and outcomes*. Paper presented at the Society for Prevention Research 23rd Annual Meeting: "Integrating Prevention Science and Public Policy," Washington, DC.
- Fosco, G. M., **Bray, B. C.**, & Grych, J. H. (2015, May). *A latent profile analysis of adolescents' appraisals and triangulation into parental conflicts: Different outcomes for different profiles*. Poster presented at the Association for Psychological Science 27th Annual Convention, New York, NY.

- *****Bray, B. C.** (2015, April). *The good, the bad, and the ugly: What we know today about latent class analysis with distal outcomes*. Paper presented at the Methodology, Analytics, & Psychometrics (MAP) Academy Emerging Scholar Series, University of Nebraska – Lincoln, Lincoln, NE.
- *****Bray, B. C.** (2015, April). *An introduction to latent class and latent profile analysis: A statistics tutorial in two parts*. Workshop presented at the Methodology, Analytics, & Psychometrics (MAP) Academy Emerging Scholar Series, University of Nebraska – Lincoln, Lincoln, NE.
- *****Bray, B. C.** (2014, August). *An introduction to latent class and latent transition analysis*. Workshop presented at the Center for Behavioral Research and Services, California State University Long Beach, Long Beach, CA.
- *****Bray, B. C.** (2014, May). *Introduction to latent class and latent profile analysis*. Workshop presented at the Learning and Performance Research Center, Department of Educational Leadership, Sports Studies, Educational and Counseling Psychology, Washington State University, Pullman, WA.
- Foti, R. J., Coyle*, P. T., & **Bray, B. C.** (2014, May). *Differentiating perceptions of leaders and followers using ILTs and IFTs*. Poster presented at the Society for Industrial/Organizational Psychology 29th Annual Conference, Honolulu, HI.
- Halliburton*, A., & **Bray, B. C.** (2013, November). *Long-term trends in U.S. adolescent inhalant use: Prevalence rates, influences of drug policy, and comparisons to other substances*. Poster presented at the Association for Cognitive and Behavioral Therapies 47th Annual Convention: "Harnessing Synergy among Multidisciplinary Sciences," Nashville, TN.
- *****Bray, B. C.**, Lanza, S. T., & Coffman, D. L. (2013, October). *The causal effect of substance use latent class membership on a distal outcome*. Paper presented at the 10th International Conference on Health Policy Statistics, Chicago, IL.
- ***Coffman, D. L., **Bray, B. C.**, & Lanza, S. T. (2013, October). *Estimating the causal effect of a latent class treatment on binary and count outcomes*. Paper presented at the 10th International Conference on Health Policy Statistics, Chicago, IL.
- *****Bray, B. C.**, & Neighbors, C. N. (2013, September). *Trends in research methodology: A workshop for early-stage investigators*. Pre-conference workshop presented at the 14th Annual National Center for Responsible Gaming Conference on Gambling and Addiction, Las Vegas, NV.
- ***Lanza, S. T., & **Bray, B. C.** (2013, June). *Summer Institute on Innovative Methods: An introduction to latent class and latent transition analysis*. Workshop presented at Penn State, University Park, PA.
- *****Bray, B. C.** (2013, June). *An introduction to latent class and latent transition analysis*. Workshop presented at Brigham Young University, Provo, UT.
- ****Bray, B. C.**, & MacKinnon, D. P. (2013, May). *Estimating the causal effect of a latent class treatment on distal behavioral and health outcomes*. Organized paper symposium presented at the Society for Prevention Research 21st Annual Meeting: "The Science of Prevention: Building a Comprehensive National Strategy for Well-Being," San Francisco, CA.
- Lanza, S. T., **Bray, B. C.**, & Coffman, D. L. (2013, May). *The causal effect of substance use latent class membership on a distal outcome*. Paper presented at the Society for Prevention Research 21st Annual Meeting: "The Science of Prevention: Building a Comprehensive National Strategy for Well-Being," San Francisco, CA.
- Coffman, D. L., **Bray, B. C.**, Lanza, S. T., & Dierker, L. C. (2013, May). *Estimating the causal effect of a latent class treatment on binary and count outcomes*. Paper presented at the Society for Prevention Research 21st Annual Meeting: "The Science of Prevention: Building a Comprehensive National Strategy for Well-Being," San Francisco, CA.
- ****Bray, B. C.**, & Novak, S. P. (2013, May). *Inhalant use as a critical, understudied substance from late childhood to adulthood: Implications and opportunities for prevention scientists*. Organized paper symposium presented at the Society for Prevention Research 21st Annual Meeting: "The Science of Prevention: Building a Comprehensive National Strategy for Well-Being," San Francisco, CA.
- Halliburton*, A., **Bray, B. C.**, & Ridenour, T. A. (2013, May). *Testing the validity of the anticipated DSM-5 inhalant use disorder diagnosis: An item response theory analysis*. Paper presented at the

- Society for Prevention Research 21st Annual Meeting: "The Science of Prevention: Building a Comprehensive National Strategy for Well-Being," San Francisco, CA.
- Butera*, N. M., **Bray, B. C.**, & Lanza, S. T. (2013, May). *Consequences of adolescent substance use latent class membership: Associations with young adult distal outcomes*. Poster presented at the Society for Prevention Research 21st Annual Meeting: "The Science of Prevention: Building a Comprehensive National Strategy for Well-Being," San Francisco, CA.
- *****Bray, B. C.** (2013, May). *An introduction to latent profile analysis*. Workshop presented for the Department of Human Development and Family Studies, The Pennsylvania State University, University Park, PA.
- Schry*, A. R., Lorenzi, J. *, Maddox*, B. B., Neal*, A., & **Bray, B. C.** (2012, November). *Predictors of rape acknowledgment in college women*. Poster presented at the 46th Annual Convention of the Association for Behavioral and Cognitive Therapies, National Harbor, MD.
- ***Lanza, S. T., & **Bray, B. C.** (2012, October). *Latent class analysis*. Workshop presented for Methods Work, Silver Spring, MD.
- Sheftall*, A. H., Crum, P., Mathias, C. W., **Bray, B. C.**, & Dougherty, D. M. (2012, June). *Adolescent substance use, stressful life events, and impulsivity*. Poster presented at the 35th Annual Meeting of the Research Society on Alcoholism, San Francisco, CA. Abstract published in *Alcoholism: Clinical and experimental research*, 36(Supplement s1), 397a.
- Sheftall*, A. H., Mathias, C. W., **Bray, B. C.**, Farris, S. J., Crum, P. M., Kuckertz, J. M., ... Dougherty, D. M. (2012, February). *Adolescent substance use, stressful life events, and impulsivity*. Poster presented at the 22nd Annual Meeting of the Texas Research Society on Alcoholism, College Station, TX.
- Wiersma, J. D., Fischer, J. L., **Bray, B. C.**, & Clifton, J. P. (November, 2011). *Young adult drinking partnerships: Where are couples 6 years later?* Poster presented at the 73rd Annual Conference of the National Council on Family Relations: "Families and the Shifting Economy," Orlando, FL.
- McGinley*, J. J., **Bray, B. C.**, Morgan, N. R., Small, M. L., & Maggs, J. L. (2011, August). *Examining the relation between card playing and personality*. Poster presented at the 119th Annual Convention of the American Psychological Association, Washington, DC.
- ****Bray, B. C.** (2011, June). *Communicating prevention research to non-academic audiences: Working effectively with the government and media*. Organized paper symposium presented at the 19th Annual Conference of the Society for Prevention Research: "Prevention Scientists Promoting Global Health: Emerging Visions for Today and Tomorrow," Washington, DC.
- ****Bray, B. C.** (2011, June). *Innovations in latent class analysis: New approaches to address classic questions*. Organized paper symposium presented at the 19th Annual Conference of the Society for Prevention Research: "Prevention Scientists Promoting Global Health: Emerging Visions for Today and Tomorrow," Washington, DC.
- Bray, B. C.**, Lanza, S. T., & Tan, X. (2011, June). *Classify-analyze approaches in latent class analysis: The importance of inclusive modeling*. Paper presented at the 19th Annual Conference of the Society for Prevention Research: "Prevention Scientists Promoting Global Health: Emerging Visions for Today and Tomorrow," Washington, DC.
- Tan, X., Lanza, S. T., & **Bray, B. C.** (2011, June). *Latent class analysis with distal outcomes: A model-based approach*. Paper presented at the 19th Annual Conference of the Society for Prevention Research: "Prevention Scientists Promoting Global Health: Emerging Visions for Today and Tomorrow," Washington, DC.
- ****Bray, B. C.**, & Lanza, S. T. (2011, May). *Advances in finite mixture modeling, causal mediation, and functional data analysis: Recent developments from The Methodology Center at Penn State*. Organized paper symposium presented at the annual meeting of the Modern Modeling Methods Conference, Storrs, CT.
- Bray, B. C.**, Lanza, S. T., & Tan, X. (2011, May). *A new approach for expanded latent class models*. Paper presented at the Modern Modeling Methods Conference, Storrs, CT.
- Etz, K., & Moser, R. (2010, June). *Everything you ever wanted to know about secondary data analysis, but were afraid to ask*. Preconference workshop presented at the 18th Annual Conference of the

- Society for Prevention Research: "Cells to Society: Prevention at All Levels," Denver, CO.
Presenters: Augustson, E., **Bray, B. C.**, Gelernter, J., Keyes, K., LeClere, F. B., Ridenour, T. A., Rutten, L. F., & Yaroch, A.
- **Bray, B. C.** (2010, June). *Understanding adolescent risk behaviors: The contribution of person-centered approaches*. Organized paper symposium presented at the 18th Annual Meeting of the Society for Prevention Research: "Cells to Society: Prevention at All Levels," Denver, CO.
- **Bray, B. C.** (2010, June). *Promoting positive program outcomes through the application of latent variable methods*. Organized paper symposium presented at the 18th Annual Meeting of the Society for Prevention Research: "Cells to Society: Prevention at All Levels," Denver, CO.
- Bray, B. C.**, Morgan, N. R., Small, M. L., & Maggs, J. L. (2009, November). *Identifying patterns of motivations to gamble among college students using latent class analysis*. Poster presented at the 10th Annual Conference of the National Center for Responsible Gaming: "Money, Money, Money: Current Issues Affecting Research, Recovery and Responsible Gaming," Las Vegas, NV.
- Tisminetzky*, M., **Bray, B. C.**, Miozzo, R., Aupont, O., & McLaughlin, T. J. (2009, November). *Profiling symptoms of depression and anxiety in patients with an acute coronary syndrome using latent class and latent transition analysis*. Paper presented at the American Heart Association Annual Scientific Sessions, Orlando, FL.
- Wiersma*, J. D., **Bray, B. C.**, & Fischer, J. L. (2009, October). *Identifying types of young adult drinking partnerships by relationship status using latent class analysis*. Poster presented at the 4th Conference on Emerging Adulthood, Atlanta, GA.
- ***Collins, L. M., Lanza, S. T., & Bray, B. C.** (2009, June). *Summer Institute on Longitudinal Methods: Latent class and latent transition analysis*. The Methodology Center at the Pennsylvania State University: University Park, PA.
- Bray, B. C.**, Morgan, N. R., Small, M. L., & Maggs, J. L. (2009, June). *Using latent class models to identify shared patterns of motivations to use alcohol and to gamble among college students*. Poster presented at the 32nd Annual Meeting of the Research Society on Alcoholism, San Diego, CA.
- Tisminetzky*, M., **Bray, B. C.**, Miozzo, R., & McLaughlin, T. J. (2009, June). *Examining the effects of treatment and patient characteristics on patient profiles of depression, anxiety and functionality after an acute coronary syndrome*. Paper presented at the 42nd Annual Meeting of the Society for Epidemiological Research: "Epidemiologists as Vectors for Transmitting Health," Anaheim, CA.
- Bray, B. C.**, Morgan, N. R., Small, M. L., & Maggs, J. L. (2009, May). *Identifying unique and shared person-level risk factors for alcohol use and gambling among college students*. Poster presented at the 17th Annual Meeting of the Society for Prevention Research: "Power of Relationships: Implications for Prevention Science," Washington, DC.
- Lai*, M. H., **Bray, B. C.**, Smith, E. A., Caldwell, L. L., Wegner, L., Flisher, A. J., ... Mathews, C. (2009, May). *Substance use and delinquency profiles among South African adolescents*. Poster presented at the 17th Annual Meeting of the Society for Prevention Research: "Power of Relationships: Implications for Prevention Science," Washington, DC.
- ***Collins, L. M., & Bray, B. C.** (2008, October). *Workshop on statistical methods in drug abuse and health-related research: Introduction to latent class/latent transition analysis for research in drug use and problem behavior*. Workshop presented at the Center for Drug Abuse Research Translation (CDART), Center for Clinical and Translational Science of the University of Kentucky: Lexington, KY.
- ***Bray, B. C.** (2008, June). *Examining gambling and substance use: Applications of advanced latent class modeling techniques for cross-sectional and longitudinal data*. Paper presented at the 22nd National Conference on Problem Gambling: "Family and Community Issues," Long Beach, CA.
- Bray, B. C.**, Cleveland, M. J., Greenberg, M. T., & Feinberg, M. E. (2008, May). *Examining differences in patterns of alcohol, tobacco, marijuana, and other drug use by gambling behavior*. Poster

- presented at the 16th Annual Meeting of the Society for Prevention Research: "Context and Prevention Science," San Francisco, CA.
- *****Bray, B. C.** (2008, March). *A multidimensional latent variable approach to the measurement of gambling*. Paper presented at the 8th Annual Scientific Meeting of the American Academy of Health Behavior: "Addictions: From Cells to Societies," Oxnard, CA.
- Bray, B. C.**, Collins, L. M., White, H. R., & Pandina, R. J. (2008, March). *Identifying and predicting types of college-student gamblers*. Poster presented at the 8th Annual Scientific Meeting of the American Academy of Health Behavior: "Addictions: From Cells to Societies," Oxnard, CA.
- Palen*, L., Smith, E. A., Caldwell, L. L., **Bray, B. C.**, & Flisher, A. J. (2008, March). *Longitudinal patterns of cigarette use among South African high school students*. Poster presented at the Biennial Meeting of the Society for Research on Adolescence, Chicago, IL.
- Bray, B. C.**, Collins, L. M., White, H. R., & Pandina, R. J. (2007, November). *An alternative approach to identifying types of gamblers: Using latent class analysis to identify and predict high-risk college-student gamblers*. Poster presented at the 8th Annual Conference of the National Center for Responsible Gaming: "Responsible Gaming, Regulation and Recovery: Testing Conventional Wisdom," Las Vegas, NV.
- ****Bray, B. C.**, & Rhoades, B. L. (2007, May). *Modeling risky behaviors with latent class and latent transition analysis: New applications and innovative approaches*. Organized poster forum presented at the 15th Annual Meeting of the Society for Prevention Research: "Advancing Science-Based Prevention: Creating Real World Solutions," Washington, DC.
- Bray, B. C.**, Lanza, S. T., & Collins, L. M. (2007, May). *Modeling the longitudinal relation between adolescent smoking and drinking behavior*. Poster presented at the 15th Annual Meeting of the Society for Prevention Research: "Advancing Science-Based Prevention: Creating Real World Solutions," Washington, DC.
- Bray, B. C.**, & Ridenour, T. A. (2006, June). *Do predictors of late childhood substance use also predict gambling during late childhood? Implications for prevention*. Poster presented at the National Council on Problem Gambling 20th Annual Conference on Prevention, Research, and Treatment of Problem Gambling: "Addressing Gambling Problems in Underserved Populations," St. Paul, MN.
- ****Bray, B. C.** (2006, June). *Recent research on gambling from late childhood to adulthood: Implications for prevention*. Organized paper symposium presented at the 14th Annual Meeting of the Society for Prevention Research: "Applying Prevention Science to Reduce Health Disparities," San Antonio, TX.
- Bray, B. C.**, & Collins, L. M. (2006, June). *The structure of gambling behavior in adulthood*. Paper presented at the 14th Annual Meeting of the Society for Prevention Research: "Applying Prevention Science to Reduce Health Disparities," San Antonio, TX.
- Ridenour, T. A., & **Bray, B. C.** (2006, June). *Do correlates of preadolescent gambling resemble correlates of early substance use targeted in prevention programs?* Paper presented at the 14th Annual Meeting of the Society for Prevention Research: "Applying Prevention Science to Reduce Health Disparities," San Antonio, TX.
- Bray, B. C.**, & Collins, L. M. (2005, December). *Using latent class analysis to examine the structure of gambling behavior*. Poster presented at the 6th Annual Conference of the National Center for Responsible Gaming: "Finding Common Ground on Prevention, Treatment, and Policy," Las Vegas, NV.
- Bray, B. C.**, & Collins, L. M. (2005, May). *The relation between the waxing and waning of adolescent substance use and delinquency*. Poster presented at the 13th Annual Meeting of the Society for Prevention Research: "Prevention Science to Public Health: Promoting Well-Being in the Population," Washington, DC.
- Bray, B. C.**, Whyte, K. S., & Collins, L. M. (2005, May). *The methodological state of research on gambling among adolescents*. Poster presented at the 13th Annual Meeting of the Society for Prevention Research: "Prevention Science to Public Health: Promoting Well-Being in the Population," Washington, DC.

- Bray, B. C.**, Zimmerman, R. S., Lynam, D., & Murphy, S. A. (2003, June). *Assessing the total effect of time-varying predictors in prevention research*. Poster presented at the 11th Annual Meeting of the Society for Prevention Research: "Research to Policy," Washington, DC.
- *****Bray, B. C.**, Zimmerman, R. S., Lynam, D., & Murphy, S. A. (2003, April). *Assessing the total effect of time-varying predictors in prevention research*. Paper presented at the University of Michigan—Dearborn, Dearborn, MI.
- Wong, P., McAuslan, P., & **Bray, B. C.** (2000, August). *Survey of problem gambling in the Metropolitan Detroit Area, 2000*. Paper presented at the Joint Mathematical Association of America and Pi Mu Epsilon National Conference, Los Angeles, CA.

Presented Locally

- *****Bray, B. C.** (2019, September). *Advancing intervention science and promoting health equity using innovative quantitative methods*. Presentation for the Community and Prevention Research Brown Bag Series, Department of Psychology, The University of Illinois at Chicago, Chicago, IL.
- *****Bray, B. C.** (2018, October). *The cutting-edge of design and analysis: Penn State's Methodology Center*. Presentation for the Penn State College of Medicine Postdoc Society, Penn State Hershey, Hershey, PA.
- *****Bray, B. C.** (2018, September). *The cutting-edge of design and analysis: Penn State's Methodology Center*. Presentation for the Human Development and Family Studies All-Campus Meeting, Penn State, University Park, PA.
- *****Bray, B. C.** (2018, February). *New advances in latent class analysis from The Methodology Center at Penn State*. Paper presented at the CTSI BERD Seminar Series, Social Science Research Institute, Penn State, University Park, PA.
- Dziak, J. J., **Bray, B. C.**, Lanza, S. T. (2017, May). *Performance of multiple imputation for missing data in latent class analysis*. Poster presented at the Rao Prize Conference, Department of Statistics, Penn State, University Park, PA.
- ***Lanza, S. T., & **Bray, B. C.** (2016, April). *Introduction to latent class analysis for health behavior research*. Workshop presented at the Department of Public Health Sciences, Penn State Hershey College of Medicine, Hershey, PA.
- *****Bray, B. C.** (2016, March). *The cutting-edge of design and analysis: Penn State's Methodology Center*. Presentation for Penn State Data Day, PSU Libraries Data Learning Center, Penn State, University Park, PA.
- *****Bray, B. C.** (2016, March). *Center for Complex Data to Knowledge in Drug Abuse and HIV Behavioral Science: What is it that we do over there on that new 4th floor?* Presentation for Spring Seminar Series, Bennett Pierce Prevention Research Center, Penn State, University Park, PA.
- *****Bray, B. C.** (2015, November). *The cutting-edge of design and analysis: Penn State's Methodology Center*. Presentation for the Stat Club, Department of Statistics, Penn State, University Park, PA.
- *****Bray, B. C.** (2015, November). *The cutting-edge of design and analysis: Penn State's Methodology Center*. Presentation for CTSI Scholars, Social Science Research Institute, Penn State, University Park, PA.
- Bray, B. C.**, Dziak, J. J., & Lanza, S. T. (2015, April). *The good, the bad, and the ugly: What we know today about latent class analysis with distal outcomes*. Poster presented at the Annual Joint Seminar of The Methodology Center and Prevention Research Center, Penn State, University Park, PA.
- Bray, B. C.**, Dziak, J. J., & Lanza, S. T. (2015, March). *The good, the bad, and the ugly: What we know today about latent class analysis with distal outcomes*. Poster presented at the College of Health and Human Development Annual Research Forum, Penn State, University Park, PA.
- *****Bray, B. C.** (2015, February). *The cutting-edge of design and analysis: Penn State's Methodology Center*. Presentation for the Stat Club, Department of Statistics, Penn State, University Park, PA.

- *****Bray, B. C.** (2015, January). *The cutting-edge of design and analysis: Penn State's Methodology Center*. Presentation for the Industrial/Organizational Psychology Program, Department of Psychology, Penn State, University Park, PA.
- Halliburton*, A. E., **Bray, B. C.**, & Ridenour, T. A. (2012, May). *Testing the validity of the anticipated DSM-5 inhalant use disorder diagnosis: An item response theory analysis*. Paper presented at the annual meeting of the Virginia Academy of Science, Norfolk, VA.
- *****Bray, B. C.** (2010, February). *Modeling relations among discrete developmental processes: A general approach to associative latent transition analysis*. Paper presented at the Department of Statistics Research Colloquium Series, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- *****Bray, B. C.** (2008, September). *A multidimensional latent variable approach to the measurement of gambling*. Paper presented at the Department of Biobehavioral Health Research Colloquium Series, The Pennsylvania State University, University Park, PA.
- *****Bray, B. C.** (2006, February). *Rambling, gambling Willie: What Bob Dylan left out about pathological gambling*. Paper presented at the Centre County Correctional Facility, Bellefonte, PA.
- *****Bray, B. C.**, & Collins, L. M. (2005, February). *Modeling the development of substance use and delinquency simultaneously: An associative latent transition analysis example*. Paper presented at The Methodology Center, The Pennsylvania State University, University Park, PA.
- Lemmon, D. R., & **Bray, B. C.** (2005, February). *Parallelization strategies for a statistical model of adolescent development*. Poster presented at Penn State Computation Day, University Park, PA.

Technology Demonstrations

- Wagner, A. T., Dziak, J. J., Huang, L., Singh, K., & **Bray, B. C.** (2020, May). *Online resources and software available through the Penn State Methodology Center*. Technology demonstration presented at the Society for Prevention Research 28th Annual Meeting: "Why Context Matters: Towards a Place-Based Prevention Science," Washington, DC. [parts of conference cancelled due to COVID-19]
- Wagner, A. T., Dziak, J. J., Huang, L., Connolly, P. H., & **Bray, B. C.** (2019, May). *Software, instructional materials, videos, and other resources from The Methodology Center at Penn State*. Technology demonstration presented at the Society for Prevention Research 27th Annual Meeting: "Prevention Science in a Big Data World," San Francisco, CA.
- Wagner, A. T., Connolly, P. H., Dziak, J. J., Huang, L., & **Bray, B. C.** (2018, May). *Online methodological resources and software from the Penn State Methodology Center*. Technology demonstration presented at the Society for Prevention Research 26th Annual Meeting: "Optimizing the Relevance of Prevention Science to Systems," Washington, DC.
- Dziak, J. J., **Bray, B. C.**, Huang, L., & Wagner, A. T. (2017, May). *Free design and analysis software for use with R and SAS from the Penn State Methodology Center*. Technology demonstration presented at the Society for Prevention Research 25th Annual Meeting: "Prevention and Public Systems of Care: Research, Policy and Practice," Washington, DC.
- Dziak, J. J., **Bray, B. C.**, Huang, L., Wagner, A. T., & Lanza, S. T. (2016, May). *Free software for data analysis and experimental design from the Penn State Methodology Center*. Technology demonstration presented at the Society for Prevention Research 24th Annual Meeting: "Using Prevention Science to Promote Health Equity and Improve Well-Being," San Francisco, CA.
- Bray, B. C.**, Dziak, J. J., Huang, L., Wagner, A. T., & Lanza, S. T. (2015, May). *New online resources and software tools for analysis and design from the Penn State Methodology Center*. Technology demonstration presented at the Society for Prevention Research 23rd Annual Meeting: "Integrating Prevention Science and Public Policy," Washington, DC.
- Bray, B. C.**, Dziak, J. J., Huang, L., Wagner, A. T., & Lanza, S. T. (2014, May). *Innovative software for prevention scientists: SAS, R, and STATA tools for analysis and experimental design*. Technology demonstration presented at the Society for Prevention Research 22nd Annual Meeting: "Comprehensive and Coordinated Prevention Systems: Building Partnerships and Transcending Boundaries," Washington, DC.

- Bray, B. C.**, Huang, L., Yang, J., Dziak, J. J., Lanza, S. T., & Wagner, A. T. (2013, May). *New SAS, R, and Stata software for prevention scientists: Tools for LCA, missing data, adaptive interventions, and EMA data*. Technology demonstration presented at the Society for Prevention Research 21st Annual Meeting: "The Science of Prevention: Building a Comprehensive National Strategy for Well-Being," San Francisco, CA.
- Lemmon, D. R., **Bray, B. C.**, Lanza, S. T., & Dziak, J. J. (2008, May). *New developments in SAS procedures for prevention research*. Technology demonstration presented at the 16th Annual Meeting of the Society for Prevention Research: "Context and Prevention Science," San Francisco, CA.
- Lemmon, D. R., **Bray, B. C.**, Lanza, S. T., & Chung, H. (2007, May). *PROC LTA: A SAS procedure for latent transition analysis*. Technology demonstration presented at the 15th Annual Meeting of the Society for Prevention Research: "Advancing Science-Based Prevention: Creating Real World Solutions," Washington, DC.
- *****Bray, B. C.** (2006, Summer). *An introduction to programming in SAS*. The Pennsylvania State University: University Park, PA.

Online Multimedia

- The Methodology Center, Penn State (Producer). (2020, June). *Latent class and latent transition analysis online learning path* [created by **Bethany Bray**]. Retrieved from The Methodology Center, Penn State (Producer). (2020, April). *The Methodology Center Teachers' Corner: Latent transition analysis* [created by **Bethany Bray**]. Retrieved from <https://www.methodology.psu.edu/ra/lca/learningpath/>
- ***The Methodology Center, Penn State (Producer). (2019, April). *Introduction to latent transition analysis with **Bethany Bray*** [video]. Retrieved from <http://methodology.psu.edu/multimedia/videos>
- ***The Methodology Center, Penn State (Producer). (2019, February). *1-and-1 Workshop: An introduction to latent class analysis with **Bethany Bray*** [virtual forum]. Retrieved from <https://zoom.us/j/5379178158> on February 26, 2019.
- ***The Methodology Center, Penn State (Producer). (2018, November). *30-and-30 Workshop: Postdoctoral Fellowships and The Prevention and Methodology Training (PAMT) T32 Program with **Bethany Bray*** [virtual forum]. Retrieved from <https://zoom.us/j/5379178158> on November 6, 2018.
- ***The Methodology Center, Penn State (Producer). (2018, March). *1-and-1 Workshop: An introduction to latent transition analysis with **Bethany Bray*** [virtual forum]. Retrieved from <https://zoom.us/j/5379178158> on March 29, 2018.
- The Methodology Center, Penn State (Producer). (2017, May). *The Methodology Center Teachers' Corner: Latent class analysis* [created by **Bethany Bray**]. Retrieved from <http://methodology.psu.edu/ra/lca/teacherscorner>
- ***The Methodology Center, Penn State (Producer). (2016, April). *Introduction to latent class analysis with **Bethany Bray*** [video]. Retrieved from <http://methodology.psu.edu/multimedia/videos>
- ***The Methodology Center, Penn State (Producer). (2013, January 22). *Methodology minutes: Latent class analysis (LCA) Part 2: Extensions of LCA with Stephanie Lanza and **Bethany Bray*** [podcast]. Retrieved from <http://methodology.psu.edu/multimedia/podcast>
- *****Bray, B. C.** [The Methodology Center, Penn State] (2012, November 28). *Introduction to PROC LCA* [video]. Retrieved from http://www.youtube.com/watch?feature=player_embedded&v=bJyrlDtyIbM
- ***The Methodology Center, Penn State (Producer). (2012, November 26). *Methodology minutes: Latent class analysis (LCA) Part 1: Common questions about LCA with Stephanie Lanza and **Bethany Bray*** [podcast]. Retrieved from <http://methodology.psu.edu/multimedia/podcast>
- ***The Methodology Center, Penn State (Producer). (2011, March 10). *Methodology minutes: Where are they now? With **Bethany Bray*** [podcast]. Retrieved from <http://methodology.psu.edu/multimedia/podcast>

Producer for Methodology Center Multimedia

Annual Report

The Methodology Center, Penn State (Producer). (2014-2021). *The Methodology Center Annual Report*. Retrieved from <http://methodology.psu.edu/publications>

eNews

The Methodology Center, Penn State (Producer). (2014-2021). *The Methodology Center eNews*. Retrieved from <http://methodology.psu.edu/publications/enews>

Learning Paths

The Methodology Center, Penn State (Producer). (2019-2021). *The Methodology Center Learning Paths* [virtual learning modules]. Retrieved from <https://www.methodology.psu.edu/ra/tvem/learningpath> Topics: latent class and latent transition analysis, time-varying effect modeling

Videos

The Methodology Center, Penn State (Producer). (2016-2021). *The Methodology Center Introductory Videos* [video]. Retrieved from <http://methodology.psu.edu/multimedia/videos>
Topics: just-in-time adaptive interventions, latent class analysis, latent transition analysis, microrandomized trials, multiphase optimization strategy, time-varying effect modeling

Podcasts

The Methodology Center, Penn State (Producer). (2014-2021). *Methodology Minutes Podcasts, Nos. 18-36* [podcast]. Retrieved from <http://methodology.psu.edu/multimedia/podcast>

Teachers' Corner

The Methodology Center, Penn State (Producer). (2017-2021). *The Methodology Center Teachers' Corner* [download]. Retrieved from <http://methodology.psu.edu/multimedia/teacherscorner>
Topics: latent class analysis, latent transition analysis, multiphase optimization strategy, time-varying effect modeling

Virtual Discussion Forums

The Methodology Center, Penn State (Producer). (2017-2021). *The Methodology Center 1-and-1 Workshops* [virtual forum/video]. Retrieved from <https://zoom.us/j/5379178158>
Topics: configural frequency analysis, factorial experiments, latent class analysis, latent transition analysis, microrandomized trials, multilevel modeling, multiphase optimization strategy, Prevention and Methodology Training (PAMT) program, time-varying effect modeling

Teaching

Graduate Courses – Required/Recommended

Measurement in Human Development (HDFS 526, Graduate)
Department: Human Development and Family Studies (Penn State)
Instructor (Fall 2018: rating 6.3/7.0)

Psychometric Theory (PSYC 5134, Graduate)
Department: Psychology (Virginia Tech)
Instructor (Spring 2012: 4.9/5.0, Spring 2011: rating 3.0/4.0)

Research Methods (PSYC 5315, Graduate)
Department: Psychology (Virginia Tech)
Instructor (Fall 2011: rating 3.9/4.0, Fall 2010: rating 4.0/4.0, Fall 2009: rating 3.1/4.0)

Graduate Applied Statistics Lab (Graduate)
Department: Human Development and Family Studies (Penn State)
Instructor (Fall 2005: rating: 6.8/7.0)

Graduate Courses – Special Topics

- Advanced Topics in Latent Class Analysis (Graduate)
 - Department: Human Development and Family Studies (Penn State)
 - Instructor (Fall 2018: 6.8/7.0, Fall 2015: rating 6.7/7.0)
- An Introduction to Latent Class and Latent Profile Analysis (Graduate)
 - Department: Human Development and Family Studies (Penn State)
 - Instructor (Fall 2017: 6.9/7.0, Fall 2014: rating 6.9/7.0)
- Latent Class Analysis for Cross-sectional and Repeated Measures Data (Graduate)
 - Department: Human Development and Family Studies (Penn State)
 - Course Assistant (2009, 2007)
 - Instructor (Fall 2012: rating 6.5/7.0)
- Applied Categorical Data Analysis (PSYC 6014, Graduate)
 - Department: Psychology (Virginia Tech)
 - Instructor (Fall 2011: rating 3.9/4.0)

Undergraduate Courses

- Principles of Psychological Research (PSYC 2094, Undergraduate)
 - Department: Psychology (Virginia Tech)
 - Instructor (Fall 2010: rating 3.7/4.0, Spring 2010: rating 4.0/4.0)
- Introduction to Statistics and Data Analysis (Undergraduate)
 - Department: Statistics (The University of Michigan)
 - Laboratory Course Instructor (2001)

Guest Lectures

- Human Decision Making
 - Department: Penn State College of Medicine
 - Guest Lecture on Research on Probability and Risk (2017)
- Social Data Analytics: Approaches and Issues
 - Department: Political Science
 - Guest Lecturer on Latent Class and Latent Transition Analysis (2016)
- Methods of Research in Human Development
 - Department: Human Development and Family Studies
 - Guest Lecturer on Sampling Designs (2008, 2006, 2005)
- Casino Operations Management
 - Department: Hotel, Restaurant, and Institutional Management
 - Guest Lecturer on Research on Gambling and Problem Gambling (2008)
- Criminology
 - Department: Sociology and Crime, Law and Justice
 - Guest Lecturer on Research on Gambling and Problem Gambling (2007, 2006)
- Sociology of Deviance
 - Department: Sociology and Crime, Law, and Justice
 - Guest Lecturer on Research on Gambling and Problem Gambling (2007)

Advising

Graduate faculty: Penn State Department of Human Development and Family Studies, 2013-2020
 Graduate faculty: Virginia Tech Department of Psychology, 2009-2013

Master's Thesis Committee Chair or Co-Chair

- Amanda Halliburton (2013, Psychology, Virginia Tech)
 - “Adolescent inhalant use in the United States: Examining long-term trends and evaluating the applicability of self-determination theory”

Master's Thesis Committee Member

Patrick Coyle (2012, Psychology, Virginia Tech)
Neville Galloway-Williams (2010, Psychology, Virginia Tech)
Thorhildur Halldorsdottir (2011, Psychology, Virginia Tech)
Nicole Kreiser (2011, Psychology, Virginia Tech)
Ashley McDonald (2017, Psychology, Penn State)
Brenna Maddox (2012, Psychology, Virginia Tech)
Scott Moshier (2011, Psychology, Virginia Tech)
Amie Schry (2011, Psychology, Virginia Tech)

Preliminary/Comprehensive Examination Committee Member

Anuradha Anantharaman (2018, Psychology, Penn State)
Patrick Coyle (2013, Psychology, Virginia Tech)
Neville Galloway-Williams (2012, Psychology, Virginia Tech)
Eric Layland (2019, Human Development & Family Studies, Penn State)
Emily LoBraico (2019, Human Development & Family Studies, Penn State)
Megan Maas (2015, Human Development & Family Studies, Penn State)
Amy Neal (2011, Psychology, Virginia Tech)
Sarah Perzow (2017, Psychology, Penn State)
Jessica Salas-Brooks (2016, Biobehavioral Health, Penn State)
Amie Schry (2011, Psychology, Virginia Tech)
Ryan Smith (2012, Psychology, Virginia Tech)
Christina Temes (2014, Psychology, Penn State)
Nicole Thompson (2011, Psychology, Virginia Tech)
Jessica Versele (2010, Psychology, Virginia Tech)

Doctoral Dissertation Committee Chair or Co-Chair

Eric Layland (ongoing, Human Development & Family Studies, Penn State)
Sarah Perzow (2018, Psychology, Penn State)
"Individual differences in adolescent coping"

Doctoral Dissertation Committee Member

Lisa Boyd (2016, Sociology and Criminology, Penn State)
Patrick Coyle (2015, Psychology, Virginia Tech)
Nicole Constance (2017, Human Development & Family Studies, Penn State)
Celina Joos (2019, Psychology, Penn State)
Bo-Ram Kim (2014, Human Development & Family Studies, Penn State)
Emily LoBraico (ongoing, Human Development & Family Studies, Penn State)
Megan Maas (2016, Human Development & Family Studies, Penn State)
Cara Pugliese (2012, Psychology, Virginia Tech)
Christina Temes (2017, Psychology, Penn State)
Mark Scott (2011, Psychology, Virginia Tech)
Zvi Shapiro (ongoing, Psychology, Penn State)
Cynthia Willner (2016, Human Development & Family Studies, Penn State)
Mengya Xia (2019, Human Development & Family Studies, Penn State)

Prevention and Methodology Training (PAMT) Program Methodology Mentor

Scott Graupensperger (2018, predoctoral, Penn State)
Emily LoBracio (2017-2019, predoctoral, Penn State)
Sarah Perzow (2015-2017, predoctoral, Penn State)
Peter Rivera (2016-2017, postdoctoral, Penn State)
Emily Simpson (2019-2021, postdoctoral, Penn State)
Mengya Xia (2016-2018, predoctoral, Penn State)

Bridget Weymouth (2016-2018, postdoctoral, Penn State)

The Methodology Center Graduate Students

Eric Layland (ongoing, Human Development & Family Studies, Penn State)
Sarah Perzow (2017-2018, Psychology, Penn State)

Graduate Minor in Quantitative Methods

Anuradha Anantharaman (2019, Psychology, Penn State)

Clinical Psychology Interns

Loretta Hsueh (2019-2020, UIC)

Visiting International Students

Cinthia Hiroko Higuchi (Escola Paulista de Medicina da Universidade Federal de São Paulo, 4/3/2017-10/2/2017)
Claire Mawditt (University College London, 5/1/2016-7/31/2016)
Aoife O'Neill (University of Limerick, 4/28/2018-5/12/2018)
Jieting "Jenny" Zhang (South China Normal University, 9/1/2012-12/31/2013)

Society for Prevention Research Sloboda and Bukoski Cup Competition Team Advisor

Boone, M., Griffin, A., & Li, A. (2015). Time-varying effects of health behaviors on cardio-metabolic outcomes in older Mexican adults.

National Institutes of Health F31 Co-Sponsor

Emily LoBraico: F31 DA048522, Understanding for whom family-based substance use prevention programs work best: A person-centered approach, 08/01/2019-07/31/2021

National Institutes of Health K01 Advisor

Jody Vogel: K08 HS023901, Improving the Quality of Patient Care and Outcomes for Frequent Emergency Department Visitors, 01/04/2015-31/03/2020

Professional Service

Journal Editorial Board Member

Health Psychology (2010-2012)

Journal Reviewing

Addiction
Addictive Behaviors
Alcoholism: Clinical and Experimental Research
American Journal of Health Behavior
Behavior Therapy
BioMed Central Public Health
Child Development
Emerging Adulthood
Evaluation and the Health Professions
Journal of Abnormal Child Psychology
Journal of Addictive Diseases
Journal of Adolescence
Journal of Adolescent Health
Journal of Affective Disorders
Journal of Child Psychology and Psychiatry
Journal of Consulting and Clinical Psychology

Journal of Gambling Studies
Journal of Methods and Measurement in the Social Sciences
Journal of School Psychology
Journal of Studies on Alcohol and Drugs
 Lawrence Erlbaum Associates, Publishers
Methodology
Multivariate Behavioral Research
Nicotine and Tobacco Research
Organizational Research Methods
Prevention Science
Psychological Methods
Psychology of Addictive Behaviors
 SAGE Publications
Social Psychiatry and Psychiatric Epidemiology
Structural Equation Modeling: A Multidisciplinary Journal

Grant Reviewing

Alberta Gaming Research Institute
 International Center for Responsible Gaming (formerly the United States National Center for Responsible Gaming)
 United States National Institutes of Health:
 Improving Outcomes for Pediatric, Adolescent and Young Adult Cancer Survivors U01 Review Panel ZCA1 RPRB-L (M2) S (05/2020)
 Conference Grant R13 Review Panel ZDA1 IXN-O (08) S (02/2018)
 Cancer Management and Health Behavior R03/R21 Omnibus Review Panel ZCA1 TCRB-B (M2) S (03/2015)
 Cancer Management and Health Behavior R03/R21 Omnibus Review Panel ZCA1 TCRB-B (J1) S (10/2014)
 United States National Science Foundation
 The Netherlands Organisation for Health Research and Development (ZonMw)
 The Netherlands Organisation for Scientific Research (NWO)
 United Kingdom Prevention Research Partnership

Other Expert Reviewing

United Kingdom Medical Research Council, Large Investments Review

Service to the National Institutes of Health

Bray, B. C. (2015, May). *The Prevention and Methodology Training Program (PAMT) at Penn State*. Visit to the National Institute on Drug Abuse (NIDA) with PAMT trainees, Bethesda, MD.
Bray, B. C. (2015, April). *The Prevention and Methodology Training Program (PAMT) at Penn State*. Visit to the National Institute on Drug Abuse (NIDA) for the NIDA Diversity Supplements Workshop, Bethesda, MD.

Service to National Professional Organizations

2020	Co-Chair, Program Thematic Sub-Committee: Increasing Health Equity and Strengthening Resilience, Society for Prevention Research Annual Meeting
2019	Moderator, Paper Symposium, National Center for Responsible Gaming Annual Conference: Ortiz, V., Perrotte, J., Rinker, D., & Bray, B. C. (2019, October). <i>Health Disparities and Minorities in Gambling and Addiction</i> . Paper symposium presented at the 20 th Annual National Center for Responsible Gaming Conference on Gambling and Addiction, Las Vegas, NV.
2019-	Member, Communications Committee, Society for Prevention Research
2019-2020	Member, Code of Conduct Committee, Society for Prevention Research

- 2019 Co-Coordinator, Grouped Paper Sessions Review, Program Thematic Sub-Committee: Development and Testing of Interventions, Society for Prevention Research Annual Meeting
- 2018- Member/Faculty Mentor for Student Review, Abstract Review Committee, Society for Prevention Research Annual Meeting
- 2018-2021 Member (elected), Board of Directors, Society for Prevention Research
- 2018-2020 Member, Planning Committee, Society for Prevention Research Annual Meeting
- 2018- Lead Member, Methods Subcommittee, Task Force: Prevention Science's Role in Reducing Disparities and Promoting Equity, Society for Prevention Research
- 2017- Member, Task Force: Prevention Science's Role in Reducing Disparities and Promoting Equity, Society for Prevention Research
- 2017-2019 Lead Member, Mentorship/Fellowship Subcommittee, Training Committee, Society for Prevention Research
- 2017-2019 Member, Strategic Planning Subcommittee, Training Committee, Society for Prevention Research
- 2017- Member, Training Committee, Society for Prevention Research
- 2017 Judge, 11th Annual SPR Sloboda and Bukoski Cup Competition, Society for Prevention Research Annual Meeting
- 2016 Judge, 10th Annual SPR Sloboda and Bukoski Cup Competition, Society for Prevention Research Annual Meeting
- 2015 Moderator, Pre-Conference Workshop, National Center for Responsible Gaming Conference: Gros, R., & Stutz, H. (2015, September). *Workshop for Researchers – Working with the Media*. Pre-conference workshop presented at the 16th Annual National Center for Responsible Gaming Conference on Gambling and Addiction, Las Vegas, NV.
- 2011- Member, Conference Planning Board, National Center for Responsible Gaming
- 2011-2015, Member, Poster Award Committee, National Center for Responsible Gaming
- 2019
- 2009-2012 Member, Annual Meeting Program Subcommittee, Early Career Preventionists Network Steering Committee, Society for Prevention Research
- 2009-2012 Member, Membership Subcommittee, Early Career Preventionists Network Steering Committee, Society for Prevention Research
- 2009-2012 Member, Newsletter Subcommittee, Early Career Preventionists Network Steering Committee, Society for Prevention Research
- 2008-2010 Member, Research Review Committee, American Academy of Health Behavior Annual Meeting
- 2007-2011 Member, Program Thematic Sub-Committee: Innovative Methods, Society for Prevention Research Annual Meeting
- 2006-2010 Member, Abstract Review Committee, Society for Prevention Research Annual Meeting

Service to UIC

- 2020 Member, Faculty Search Committee, Center for Dissemination and Implementation Science
- 2019- Member, Navigating Allyship Educational Group, Gender and Sexuality Center

Service to Penn State

- 2018-2019 Member, Executive Committee, The Penn State Consortium to Combat Substance Abuse
- 2018-2019 Member (elected), Non-Tenure Line Promotion Review College Committee, College of Health and Human Development
- 2017 Panel Member, Discussion on Research in Health and Human Development at Penn State, Health and Human Development Honor Society
- 2017-2019 Member, LGBTQA Safe Zone Program, LGBTQA Student Resource Center, Student Affairs

- 2017-2018 Executive Committee Member, Research Computing and Cyberinfrastructure Governance (appointed by Dr. Neil Sharkey, Vice President for Research)
- 2017-2019 Co-Chair/Member, Research Computing and Cyberinfrastructure Governance Communications and Onboarding working group
- 2016-2017 Member, Office of the Vice President for Information Technology (OVPIT) Search Committee for Assistant Senior Director, Enterprise Infrastructure
- 2016-2017 Member, Research Cyberinfrastructure working group "Communications and Onboarding"
- 2015 *****Bray, B. C.** (2015, November). *Grant writing in the social, behavioral, and health sciences*. Discussion hosted at the Center for Teaching Initiatives, Penn State Erie, the Behrend College.
- 2015-2016 Member, Research Cyberinfrastructure working group "Data, Data Governance, Data Preservation, Data Dissemination, Data Security, Managing the Scientific Data Life-Cycle"
- 2005-2006 Graduate Student Representative, Developmental Methodology Faculty Search Committee, Department of Human Development and Family Studies
- 2004-2005 Co-Chair, Graduate Student Steering Committee, Department of Human Development and Family Studies
- 2003-2004 Community Outreach Representative, Graduate Student Steering Committee, Department of Human Development and Family Studies
- 2002-2003 Graduate Student Association Representative, Graduate Student Steering Committee, Department of Human Development and Family Studies

Service to Virginia Tech

- 2011-2013 Member, LGBTQA Safe Zone Program, Community and Cultural Centers, Student Affairs
- 2011 Faculty Guest Speaker, Psychology Club/Psi Chi Meeting
- 2010-2012 Proposal Reviewer, Graduate Research Development Program (GRDP) Student Grant Program
- 2010-2011 Application Review Committee Member, Departmental Council of Graduate Departments of Psychology (COGDOP)
- 2009 Faculty Representative, Psi Xi Graduate School Panel

Consulting

- 2020- Internal Medicine, Atrium Health, Stephanie Taylor (latent class and latent profile modeling)
- 2019- Helping to End Addiction Long-term (HEAL) Prevention Coordinating Center Consultant, Research Triangle Institute, National Institutes of Health HEAL Prevention Initiative Cooperative Agreement
- 2017-2019 Tobacco Centers of Regulatory Science (TCORS), National Institutes of Health-Food and Drug Administration, Westat Coordinating Center (latent class and latent transition modeling)
- 2016-2018 Center for Health Research, Kaiser Permanente, Stephanie Fitzpatrick (latent class modeling)
- 2016-2017 Department of Medicine, The University of Chicago, Megan Huisingh-Scheetz (latent class modeling)
- 2015-2017 Dana-Farber Cancer Institute, Center for Community Based Research and Harvard T. H. Chan School of Public Health, Department of Social and Behavioral Sciences, Reginald Tucker-Seeley (latent class modeling)
- 2014-2018 External Advisory Steering Committee Member, Program Evaluation for Prevention (PEP-C) Contract to RTI International from the Substance Abuse Mental Health Services Administration (SAMHSA), Center for Substance Abuse Prevention (CSAP)

- 2014-2015 Neurobehavioral Research Laboratory and Clinic, University of Texas Health Science Center, Donald M. Dougherty (growth curve modeling)
- 2012-2014 Department of Epidemiology, Mailman School of Public Health, Columbia University, Silvia S. Martins (latent transition modeling)
- 2010-2011 Department of Mental Health, Bloomberg School of Public Health, Johns Hopkins University, Silvia S. Martins (latent transition modeling)
- 2008-2009 Department of Epidemiology and Community Health, University of Minnesota, Melissa Nelson Laska (latent class modeling)

Service to Others

- 2015 *****Bray, B. C.** (2015, April). *Emerging scholars meeting: Answering your questions about my career*. Discussion hosted at the Methodology, Analytics, & Psychometrics (MAP) Academy Emerging Scholar Series, University of Nebraska – Lincoln, Lincoln, NE.
- 2005-2009 Help Desk Director, The Methodology Center (internationally available help and collaboration on latent class modeling techniques and software distributed by The Methodology Center)

Professional Memberships

- American Statistical Association
- Institute of Mathematical Statistics
- Society for Prevention Research