**Selected Recommended Readings**

**Introductions to Latent Class and Latent Transition Analysis**

Collins, L. M., & Lanza, S. T. (2010). *Latent class and latent transition analysis: With applications in the social, behavioral, and health sciences*. New York, NY: Wiley.

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.

**Applications**

**Addictive Behaviors Research**

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*, 188-194. doi: 10.1016/j.jadohealth.2014.02.001 PMCID: PMC4108554

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 PMCID: PMC5103938

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,* 203-235. PMCID: PMC3171700

Lanza, S. T., Patrick, M. E., & Maggs, J. L. (2010). Latent transition analysis: Benefits of a latent variable approach to modeling transitions in substance use. *Journal of Drug Issues, 40*, 93-120. PMCID: PMC2909684

Maldonado, M. M., & Lanza, S. T. (2010). A framework to examine gateway relations in drug use: An application of latent transition analysis. *Journal of Drug Issues, 40,*901-924. doi: 10.1177/002204261004000407 PMCID: PMC3400537

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*, 211-219. doi: 10.1093/ntr/ntn017 PMCID: PMC2658905

Zhang, J., 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 PMCID: PMC4397499

**HIV Research**

Lanza, S. T., & Collins, L. M. (2008). A new SAS procedure for latent transition analysis: Transitions in dating and sexual risk behavior. *Developmental Psychology, 44*, 446-456. doi: 10.1037/0012-1649.44.2.446 PMCID: PMC2846549

Lanza, S. T, Kugler, K. C., & Mathur, C. (2011). Differential effects for sexual risk behavior: An application of finite mixture regression. *The Open Family Studies Journal, 4*(Suppl. 1-M9), 81-88. PMCID: PMC3487167

Smith, R. A., & Lanza, S. T. (2011). Testing theoretical network classes and HIV-related correlates with latent class analysis. *AIDS Care, 23,*1274-1281. doi: 10.1080/09540121.2011.555747 PMCID: PMC3181093

Vasilenko, S. A., Kugler, K. C., Butera, N. M. & Lanza, S. T. (2014). Patterns of adolescent sexual behavior predicting young adult sexually transmitted infections: A latent class analysis approach.*Archives of Sexual Behavior, 44*, 705-715*.*doi: 10.1007/s10508-014-0258-6 PMICD: PMC4107199

**Intervention Research**

Cleveland, M. J., Lanza, S. T., Ray, A. E., Turrisi, R., & Mallett, K. M. (2012). Transitions in first-year college student drinking behaviors: Does drinking latent class membership moderate the effects of parent- and peer-based intervention components? *Psychology of Addictive Behaviors, 26,* 440-450. doi: 10.1037/a0026130 PMCID: PMC3413757

Cooper, B. R., & Lanza, S. T. (2014). Who benefits most from Head Start? Using latent class moderation to exaimne differential treatment effects. *Child Development, 85,*2317-2338. doi: 10.1111/cdev.12278 PMCID: PMC4236273

Lanza, S. T. & Rhoades, B. L. (2013). Latent class analysis: An alternative perspective on subgroup analysis in prevention and treatment. *Prevention Science, 14,* 157-168. doi: 10.1007/s11121-011-0201-1 PMCID: PMC3173585

**Risk Factors Research**

Cleveland, M. J., Collins, L. M., Lanza, S. T., Greenberg, M. T., & Feinberg, M. E. (2010). Does individual risk moderate the effect of contextual-level protective factors? A latent class analysis of substance use. *Journal of Prevention and Intervention in the Community, 38,*213-228. doi: 10.1080/10852352.2010.486299 PMCID: PMC2898733

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,*319-325. doi: 10.1016/j.jadohealth.2013.09.007 PMCID: PMC3943167

Lanza, S. T. & Rhoades, B. L. (2013). Latent class analysis: An alternative perspective on subgroup analysis in prevention and treatment. *Prevention Science, 14,* 157-168. doi: 10.1007/s11121-011-0201-1 PMCID: PMC3173585

Lanza, S. T., Rhoades, B. L., Greenberg, M. T., Cox, M. J., & The Family Life Project Key Investigators (2011). Modeling multiple risks during infancy: Contributions of a person-centered approach. *Infant Behavior and Development, 34*, 390-406. doi: 10.1016/j.infbeh.2011.02.002 PMCID: PMC3134117

Lanza, S. T., Rhoades, B. L., Nix, R. L., Greenberg, M. T., & the Conduct Problems Prevention Research Group (2010). Modeling the interplay of multilevel risk factors for future academic and behavior problems: A person-centered approach. *Development and Psychopathology, 22,* 313-335. doi: 10.1017/S0954579410000088 PMCID: PMC3005302

Rhoades, B. L., Greenberg, M. T., Lanza, S. T., & Blair, C. (2011). Demographic and familial predictors of early executive function development: Contribution of a person-centered perspective. *Journal of Experimental Child Psychology, 108*, 638-662. doi: 10.1016/j.jecp.2010.08.004 PMCID: PMC3016464

**Methodology**

**Compared to Cluster Analysis**

Magidson, J., & Vermunt, J. K. (2002). Latent class models for clustering: A comparison with k-means. *Canadian Journal of Marketing Research, 20*, 37-44. doi: 10.1.1.128.9157

**Power Analysis**

Dziak, J. J., Lanza, S. T., & Tan, X. (2014). Effect size, statistical power and sample size requirements for the bootstrap likelihood ratio test in latent class analysis. *Structural Equation Modeling, 21*, 534-552*.* doi: 10.1080/10705511.2014.919819 PMCID: PMC4196274

Nylund, K. L., Asparouhov, T., & Muthen, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling, 14*, 535-569. doi: 10.1080/10705510701575396

**Distal Outcomes**

Bakk, Z., & Vermunt, J. K. (2016). Robustness of stepwise latent class modeling with continuous distal outcomes. *Structural Equation Modeling, 23*, 20-31. doi: 10.1080/10705511.2014.955104

Bray, B. C., Lanza. S. T., & Tan, X. (2015). Eliminating bias in classify-analyze approaches for latent class analysis. *Structural Equation Modeling, 22*, 1-11. doi: 10.1080/10705511.2014.935265 PMCID: PMC4299667

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*, 107-116. doi: 10.1027/1614-2241/a000114 PMCID: In process

**Causal Inference**

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 PMCID: PMC6139077

Butera, N. M., Lanza, S. T., & Coffman, D. L. (2014). A framework for estimating causal effects in latent class analysis: Is there a causal link between early sex and subsequent profiles of delinquency? *Prevention Science, 15*, 397‐407. doi: 10.1007/s11121-013-0417-3 PMCID: PMC3888479

Lanza, S. T., Coffman, D. L., & Xu, S. (2013). Causal inference in latent class analysis. *Structural Equation Modeling, 20*, 361-383. doi: 10.1080/10705511.2013.797816 PMCID: PMC4240500

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.

Schuler, M. S., Leoutsakos, J. S., & Stuart, E. A. (2014). Addressing confounding when estimating the effects of latent classes on a distal outcome. *Health Services Outcomes and Research Methodology*, *14*, 232-254. doi: 10.1007/s10742-014-0122-0 PMCID: PMC4269287

**Longitudinal Models**

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, 17*, 541-569. doi: 10.1080/10705511.2010.510043 PMCID: PMC3094019

Chung, H., Park, Y., & Lanza, S. T. (2005). Latent transition analysis with covariates: Pubertal timing and substance use behaviors in adolescent females. *Statistics in Medicine, 24*, 2895-2910. doi: 10.1002/sim.2148

Lanza, S. T., & Collins, L. M. (2006). A mixture model of discontinuous development in heavy drinking from ages 18 to 30: The role of college enrollment. *Journal of Studies on Alcohol, 67*, 552-561.

Lanza, S. T., & Collins, L. M. (2008). A new SAS procedure for latent transition analysis: Transitions in dating and sexual risk behavior. *Developmental Psychology, 44*, 446-456. doi: 10.1037/0012-1649.44.2.446 PMCID: PMC2846549