

Brian P. Flaherty

Office Address: Department of Psychology
University of Washington
Box 351525
Seattle, WA 98195-1525
Office Phone: (206) 616-0402
FAX: (206) 685-3157
Email address: bxf4@u.washington.edu
UW homepage: <http://faculty.washington.edu/bxf4>
Psychology webpage: <http://tinyurl.com/ppu63>

Education

2003 Ph.D., Department of Human Development and Family Studies, minor in Statistics, The Pennsylvania State University. Thesis title: Continuous and categorical indicator latent class models.
1997 M.S., Department of Human Development and Family Studies, The Pennsylvania State University. Thesis title: Assessing stage-sequential reciprocal influence with latent transition analysis.
1992 B.A., Psychology, The State University of New York at Buffalo.

Research Interests

Categorical and longitudinal statistical models;
Measurement and psychometrics;
Developmental theory and methods;
Substance use and dependence;
Classification and cluster analysis.

Professional Experience

09/2005–present Assistant Professor, Department of Psychology, University of Washington
04/2003–08/2005 Research Associate, The Pennsylvania State University.
08/2000–03/2003 Research Assistant, The Pennsylvania State University, funded by the Research Network on the Etiology of Tobacco Dependence (TERN), chaired by Richard Clayton at the University of Kentucky.
08/1999–07/2000 Research Assistant, The Pennsylvania State University, funded by the Methodology Center at Penn State and the Research Network on the Etiology of Tobacco Dependence (TERN), chaired by Richard Clayton at the University of Kentucky.

- 06/1995–07/1999 Graduate Assistant, The Pennsylvania State University, Project: Latent transition analysis. Supervisor: Linda M. Collins, Ph.D.
- 08/1995–02/1996 Graduate Assistant, The Pennsylvania State University. Project: Rural Young Adult Transition Study. Supervisors: Lisa J. Crockett, Ph.D. and Judith Vicary, Ph.D.
- 11/1994–01/1995 Data/Computer Consultant, Research Institute on Addictions, Buffalo, NY.
- 05/1993–06/1995 Research Assistant, The State University of New York at Buffalo. Project: Adolescent Health Risk Study. Supervisor: M. Lynne Cooper, Ph.D.

Grants

- 2004–2014 National Institute on Drug Abuse
Psychometric and Genetic Assessments of Substance Use
R01DA018673 (received a MERIT award)
Michael Neale (PI)
Brian P. Flaherty (subcontract PI)
First five-year total subcontract award \$440,000 (approx.)

Teaching Experience

Graduate teaching interests:

- Developmental research methods
- Factor analysis and structural equation modeling
- Multivariate statistics
- Experimental design and the analysis of variance

Undergraduate teaching interests:

- Psychological statistics
- Introduction to human development

Honors and Awards

- 1995–1997 Graham Fellowship, The Pennsylvania State University.
- 2003–2004 Robert Wood Johnson Research Network on the Etiology of Tobacco Dependence (TERN) Faculty Scholar
- 2004–present Member of the National Cancer Institute and American Legacy Foundation Research Network on Tobacco and Health Disparities (TReND)

Professional Affiliations

American Psychological Association (Division 5)

American Statistical Association

Psychometric Society

Society for Nicotine and Tobacco Research

Departmental Service and Activities

Member of the Diversity Research Group

Assisting in planning a Quantitative Specialty

Consultant on multiple graduate student NRSA applications

Consulting with faculty and post-doc's on research design and analysis

Reviewed UW graduate fellowships applications

Guest lectures and seminars:

- Exploring latent class and mixture applications in Cognitive Psychology. (Apr. 2006). Seminar in Cognitive area research series.

University Service and Activities—UW

Consulting with faculty and graduate students in Social Work and the Veteran's Administration Hospital.

Faculty affiliate of: Addictive Behaviors Research Center, Center for Statistics and the Social Sciences, and the Center for Studies in Demography and Ecology

Training grant involvement: NIAAA through the Addictive Behaviors Research Center; NICHD through the Center for Studies in Demography and Ecology.

Guest lectures and seminars:

- Introduction to my research and identifying common interests. (Jan. 2006). Presentation to the Social Development Research Group.
- Issues in longitudinal research design. (Mar. 2006). Guest lecture in Social Work Prevention Research graduate seminar.
- Longitudinal latent class models and an associative parameterization. (Apr. 2006). Brown-bag seminar to the Center for Statistics and the Social Sciences.
- Associative latent transition models: Examining relations between tobacco and alcohol use. (Apr. 2006). Presentation to the Social Development Research Group.

University Service and Activities—Penn State

Judge for the Graduate Student Research Exhibition

University Hearing Board member

HDFS Graduate Curriculum Review Committee

Professional Service and Activities

Ad hoc reviewer for *Addiction*, *American Journal of Public Health*, *American Sociological Review*, *Applied Psychological Measurement*, *Drug and Alcohol Dependence*, *International Journal of Behavioral Development*, *Journal of Adolescence*, *Journal of Mathematical Psychology*, *Multivariate Behavioral Research*, *Nicotine and Tobacco Research*, and *Psychological Methods*.

Ad hoc grant reviewer for NIDA and NIMH.

Reviewer for 2002 meeting of the Society of Behavioral Medicine.

Reviewer for 2002 meeting of the Society for Prevention Research.

Invited Presentations

Flaherty, B. P. (February, 1998). Reciprocal influence in peer relations. Pre-conference presentation at the Society for Research on Adolescence meeting in San Diego, CA.

Flaherty, B. P. (May, 2006). Examining contingent discrete change over time with associative latent transition analysis. Presented at the Inaugural meeting of the Center for Integrated Latent Variable Research in College Park, MD.

Conference Presentations

Flaherty, B. P., Clopper, R. R., & Cooper, M. L. (June, 1995). Pubertal timing affects adolescent sexual risk behavior. Presented at the Annual Convention of the American Psychological Society in New York, NY.

Graham, J. W., Collins, L. M., & Flaherty, B. P. (August, 1996). LTA with missing data: A multiple imputation solution. Presented at the Annual Meetings of the American Psychological Association in Toronto, Ontario.

Flaherty, B. P., Graham, J. W., & Collins, L. M. (August, 1996). Tracing the process of drug use onset with latent transition analysis. Presented at the Annual Meetings of the American Psychological Association in Toronto, Ontario.

Collins, L. M., Graham, J. W., & Flaherty, B. P. (November, 1996). A latent transition analysis approach to assessing mediation: Back to basics. Presented at the Annual Meetings of the Society of Multivariate Experimental Psychology in Evanston, IL. (Presidential Address).

Flaherty, B. P. & Shanahan, M. J. (March, 1997). Patterns of adolescent time use. Presented at Annual Graduate Research Exhibition in University Park, PA.

Darling, N., Flaherty, B. P., & Dwyer, K. M. (April, 1997). What do I want for my child? The relationship between mothers' goals, style, and practices. Presented at the biennial Meetings of the Society for Research on Child Development in Washington, D.C.

Collins, L. M. & Flaherty, B. P. (April, 1997). Using latent transition analysis to analyze data from prevention trials. Presented at the Design and Analysis of Prevention Trials for the Future meeting, Johns Hopkins University School of Hygiene and Public Health, Baltimore, MD.

Flaherty, B. P., Cumsille, P., & Sayer, A. G. (May, 1997). Structural invariance of parental monitoring. Presented at the Annual Meetings of the Society for Prevention Research in Baltimore, MD.

Guttmann-Bauman, I., Strugger, M., Flaherty, B. P., & McEvoy, R. (June, 1997). Metabolic control and quality of life self-assessment in adolescents with IDDM. Presented at the American Diabetes Association meeting in Boston, MA.

Flaherty, B. P. (August, 1997). Methodological considerations in applying the trait-state distinction to behavior. Presented at the Annual Convention of the American Psychological Association in Chicago, IL.

Shanahan, M. J. & Flaherty, B. P. (February, 1998). Developmental models of adolescent time use and the transition to adulthood. Presented at the Society for Research on Adolescence meeting in San Diego, CA.

Flaherty, B. P. & Collins, L. M. (October, 1998). Modeling transitions in two sequences simultaneously. Presented at the New Methods for the Analysis of Change conference in University Park, PA.

Flaherty, B. P., Collins, L. M. & Darling, N. (June, 1999). Modeling inter-relations between two stage sequences: The example of psychological distress and substance use onset. Presented at the Annual Meetings of the Society for Prevention Research in New Orleans, LA.

Shanahan, M. J. & Flaherty, B. P. (May, 2000). Time use in adolescence and the transition to adulthood. Presented at the European Association for Adolescent Research meeting in Jena, Germany.

Giovino, G. A., Wani, A., & Flaherty, B. P. (June, 2000). Measuring tobacco use in young people. Invited presentation at the National Cancer Institute's "Tobacco Use Among Youth Investigators" meeting in Denver, CO.

Flaherty, B. P., Schafer, J. L., Collins, L. M., & Darling, N. (July, 2000). Continuous and categorical indicator latent class models. Presented at the International Federation of Classification Societies meeting in Namur, Belgium.

Hofer, S. M. & Flaherty, B. P. (November, 2000). Narrow age-cohort analysis of cross-sectional data. Presented at the Gerontological Society of America conference in Washington, D.C.

Flaherty, B. P., Hofer, S. M., Sliwinski, M., & Piccinin, A. M. (November, 2000). Use of measurement bursts in models of change. Presented at the Gerontological Society of America conference in Washington, D.C.

Flaherty, B. P. & Giovino, G. A. (January, 2001). Using an expanded latent class model to investigate adolescent cigarette smoking. Presented at the eighth biennial Centers for Disease

Control/Agency for Toxic Substances and Disease Registry symposium on statistical methods in Atlanta, GA.

Shanahan, M. J. & Flaherty, B. P. (April, 2001). Adolescent time use and the transition to adulthood. Presented at the 2001 meeting Society for Research on Child Development biennial meeting in Minneapolis, MN.

Tang, Z., Flaherty, B. P., & Collins, L. M. (June, 2001). Using two-sequence analysis to simultaneously model transitions in adolescent substance use and sexual behavior. Presented at the annual meeting of the Society for Prevention Research in Washington, D.C.

Flaherty, B. P. & Giovino, G. A. (February, 2002). Prospective prediction of three transitions in cigarette smoking. Presented at the annual meeting of the Society for Nicotine and Tobacco Research in Savannah, GA.

Hofer, S. M., Sliwinski, M. J., & Flaherty, B. P. (April, 2002). Problems of sharing age-related variance and the limitations of partialling for age. Presented at the biennial Cognitive Aging Conference, Atlanta.

Flaherty, B. P. (May, 2002). An expanded latent class analysis of parenting styles. Presented at the Fifth International Institute on Developmental Science in University Park, PA.

Hofer, S. M., Flaherty, B. P., & Sliwinski, M. J. (August, 2002). Associations due to mean trends in cross-sectional, time-dependent data. Presented at the International Society for the Study of Behavioral Development, Ottawa.

Flaherty, B. P., Schafer, J. L., Collins, L. M., & Darling, N. (August, 2002). Latent class models with continuous and categorical indicators. Presented at the 2002 Joint Statistical Meetings in New York City.

Collins, L. M., Flaherty, B. P., & Tang, Z. (August, 2002). Two-sequence latent transition models. Presented at the 2002 Joint Statistical Meetings in New York City.

Collins, L. M., Tang, Z., & Flaherty, B. P. (October, 2002). Two-sequence latent transition models. Presented at the Society of Multivariate Experimental Psychology in Charlottesville, VA.

O'Connor, R. J., Flaherty, B. P., Kozlowski, L. T. & Quinio, B. A. (February, 2003). Regular smokeless tobacco use is not a predictor of smoking onset when psychosocial predictors are included in the model: An analysis of the TAPS Longitudinal Survey. Presented at the annual meeting of the Society for Research on Nicotine and Tobacco in New Orleans.

Kozlowski, L. T., O'Connor, R. J., Quinio, B. A. & Flaherty, B. P. (February, 2003). Most smokeless tobacco use is not a causal gateway to cigarettes: Using order of product use to evaluate causation in a national U.S. sample. Presented at the annual meeting of the Society for Research on Nicotine and Tobacco in New Orleans.

Flaherty, B. P. & Collins, L. M. (February, 2003). Stability and change in cigarette smoking classes of U.S. adolescents. Presented at the annual meeting of the Society for Research on Nicotine and Tobacco in New Orleans.

Flaherty, B. P. & Shiffman, S. (February, 2004). Factor structure of the Nicotine Dependence Syndrome Scale in the 2001 National Household Survey of Drug Abuse. Presented at the annual meeting of the Society for Research on Nicotine and Tobacco in Scottsdale, AZ.

Flaherty, B. P. & Shiffman, S. (February, 2004). Correlates of the Nicotine Dependence Syndrome Scale in a representative U.S. sample. Presented at the annual meeting of the Society for Research on Nicotine and Tobacco in Scottsdale, AZ.

Collins, L. M., Flaherty, B. P., & Tang, Z. (July, 2004). Associative latent transition analysis (ALTA) models: Assessing the relation between two longitudinal stage sequences. Presented at the 24th Biennial Conference of the Society for Multivariate Analysis in the Behavioral Sciences in Jena, Germany.

Flaherty, B. P., Schafer, J. L., & Collins, L. M. (July, 2004). Fit assessment and model selection in a mixed indicator latent class model. Presented at the 24th Biennial Conference of the Society for Multivariate Analysis in the Behavioral Sciences in Jena, Germany.

Publications

Guttmann-Bauman, I., Flaherty, B. P., Strugger, M., & McEvoy, R. (1998). Metabolic control and quality of life self-assessment in adolescents with IDDM. *Diabetes Care*, 21, 915–918.

Collins, L. M., Graham, J. W., & Flaherty, B. P. (1998). An alternative framework for defining mediation. *Multivariate Behavioral Research*, 33, 295–312.

Guttmann-Bauman, I. & Flaherty, B. P. (2000). Influence of insulin dose on metabolic control in children and adolescents on MDI regimens. *Diabetes*, Suppl 1(49), A358.

Shanahan, M. J. & Flaherty, B. P. (2001). Dynamic patterns of time use strategies in adolescence. *Child Development*, 72, 385–401.

Dierker, L. C., Avenevoli, S., Merikangas, K. R., Flaherty, B. P., & Stolar, M. (2001). Association between psychiatric disorders and the progression of tobacco use behaviors. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40, 1159–1167.

Lanza, S., Flaherty, B. P., & Collins, L. M. (2002). Latent class and latent transition analysis. In J. Schinka & W. Velicer (Eds.), *Research Methods in Psychology, Volume 2 of Handbook of Psychology (I. B. Weiner, Editor-in-Chief)* (pp. 663–685). New York, NY: John Wiley & Sons.

Hofer, S. M., Sliwinski, M. J., & Flaherty, B. P. (2002). Understanding aging: Further commentary on the limitations of cross-sectional designs for aging research. *Gerontology*, 48, 22–29.

Flaherty, B. P. (2002). Assessing the reliability of categorical substance use items with latent class analysis. *Drug and Alcohol Dependence*, 68S, 7–20.

Collins, L. M., Flaherty, B. P. & Colby, S. (Eds.). (2002). Supplemental issue of *Drug and Alcohol Dependence* focusing on design and measurement considerations in substance use research, 68.

- Collins, L. M. & Flaherty, B. P. (2002). Latent class models for longitudinal data. In J. Hagenaars & A. McCutcheon (Eds.), *Applied Latent Class Analysis* (pp. 287–303). Cambridge, NY: Cambridge University Press,.
- Collins, L. M. & Flaherty, B. P. (2003). Methodological considerations in prevention research. In Z. Sloboda & B. Bukoski (Eds.), *Handbook for Drug Abuse Prevention Theory, Science, and Practice* (pp. 557–573). New York, NY: Kluwer Academic Publishers.
- Kozlowski, L. T., O'Connor, R. J., Quinio, B. A., & Flaherty, B. P. (2003). Most smokeless tobacco use is not a causal gateway to cigarettes: Using order of product use to evaluate causation in a national U.S. sample. *Addiction*, 98, 1077–1085.
- O'Connor, R. J., Flaherty, B. P., Quinio, B. A., & Kozlowski, L. T. (2003). Regular smokeless tobacco use is not a reliable predictor of smoking onset when psychosocial predictors are included in the model. *Nicotine and Tobacco Research*, 5, 535–543.
- Kozlowski, L. T., O'Connor, R. J., Quinio, B. A., & Flaherty, B. P. (2004). Most smokeless tobacco use is not a causal gateway to cigarettes: Response to Tomar & Loree 2004. *Addiction*, 99, 262–264.
- Lanza, S. T., Collins, L. M., Schafer, J. L. & Flaherty, B. P. (2005). Using data augmentation to obtain standard errors and conduct hypothesis tests in latent class and latent transition analysis. *Psychological Methods*, 10, 84–100.
- O'Connor, R. J., Kozlowski, L. T., Flaherty, B. P. & Edwards, B. Q. (2005). Most smokeless tobacco use does not cause cigarette smoking: Results from the 2000 National Household Survey on Drug Abuse. *Addictive Behaviors*, 30, 325–336.
- Hofer, S. M., Flaherty, B. P. & Hoffman, L. (2006). Cross-sectional analysis of time-dependent data: Mean-induced association in age-heterogeneous samples and an alternative method based on sequential narrow age-cohort samples. *Multivariate Behavioral Research*, 41, 165–187.
- Nichter, M., Nichter, M., Lloyd-Richardson, E. E., Flaherty, B. P., Carkoglu, A. & Taylor, N. (2006). Gendered dimensions of smoking among college students. *Journal of Adolescent Research*, 21, 215–243.
- Chung, H., Flaherty, B. P. & Schafer, J. L. (2006). Latent class logistic regression: Application to marijuana use and attitudes among high-school seniors. *Journal of the Royal Statistical Society, Series A*, 169, 723–743.
- Cumsille, P., Darling, N. & Flaherty, B. P. (In press). Chilean adolescents' beliefs about the legitimacy of parental authority: Individual and age-related differences. *International Journal of Behavioral Development*.
- Colder, C. R., Lloyd-Richardson, E. E., Flaherty, B. P., Hedeker, D., Segawa, E., Flay, B. R. & TERN (In press). The natural history of college smoking: Trajectories of daily smoking during the freshman year. *Addictive Behaviors*.

Submitted or In Preparation

Costello, D., Dierker, L., Sledjeski, E., Flaherty, B., Flay, B. & Shiffman, S. (Submitted). Confirmatory factor analysis of the Nicotine Dependence Syndrome Scale in an American college sample of light smokers. Submitted to Nicotine and Tobacco Research.

Flaherty, B. P. & Collins, L. M. (In preparation). Examining contingent discrete change over time with associative latent transition analysis. To appear in *Mixture models in latent variable research*. Greenwich, CT: Information Age Publishing.

Flaherty, B. P. & Collins, L. M. (Under revision). Using associative latent transition analysis to examine linked processes. To be re-submitted to Psychological Methods.

September 28, 2006