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## VITA

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### ADDRESS

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### EDUCATION

1971-77 University of Uppsala, Sweden, Ph.D., Statistics, May 1977

1968-70 University of Uppsala Sweden, B.S., Statistics, November 1970

### HONORS AND ACTIVITIES

2011 Lifetime achievement award from the Psychometric Society

1996-2007 Independent Scientist Award, NIAAA

1993-99 Senior Associate Research Scientist, Research Institute on Addictions,  
SUNY - Buffalo.

1993-96 Member of the Defense Advisory Committee for Military Personnel  
Testing, Department of Defense.

1992-95 Member of the Visiting Panel on Research for Large-Scale Assessment,  
Educational Testing Service.

1991-94 Member of the Design and Analysis Committee for the National  
Assessment of Educational Progress (NAEP), Educational Testing  
Service.

- 1989-92 Member of the National Academy of Sciences/National Research Council Committee on Military Enlistment Standards.
- 1989-90 Member of the Los Angeles Unified School District Research Advisory Committee.
- 1989 Invited Fellow at the Center for Advanced Study in the Behavioral Sciences, Stanford, CA, 1990-91.
- 1988-89 President of the Psychometric Society.
- 1988-94 Associate Editor for Psychometrika.
- 1987-91 Member of the Journal of Educational Statistics Management Committee.
- 1985-94 Associate Editor for the Journal of Educational Statistics.
- 1982-84 Associate Editor for Evaluation Review.
- 1984-93 Member of the Editorial Board for Sociological Methods and Research.
- 1980 Swedish Academic title Docent (for significant scientific work after the Ph.D.).
- 1974-75 Visiting scholar at the Departments of Economics and Sociology at the University of Wisconsin, Madison, USA.

#### FIELDS OF RESEARCH INTEREST

Latent variable modeling, measurement error modeling, multilevel modeling, longitudinal analysis, analysis of categorical data, missing data, factor analysis, structural equation modeling, item response theory, log-linear modeling, selection bias, statistical computer programs, preventive interventions.

#### PROFESSIONAL SOCIETIES

1993 - present American Society of Human Genetics

1992- present Society for Multivariate Experimental Psychology

1988 - present National Council on Measurement in Education

1988- present Institute of Mathematical Statistics

1982- present American Educational Research Association

1981- present American Statistical Association

1977- present Psychometric Society

### PROFESSORSHIPS

Professor Emeritus, Graduate School of Education & Information Studies, University of California, Los Angeles, January 2008 – Present.

Professor, Graduate School of Education & Information Studies, University of California, Los Angeles, July 1988 – December 2007.

Associate Professor, Graduate School of Education, University of California, Los Angeles, July 1984 - June 1988.

Assistant Professor, Graduate School of Education, University of California, Los Angeles, July 1982 - June 1984.

### RESEARCH EXPERIENCE

Independent Scientist Award (K02 renewal), National Institute on Alcohol Abuse and Alcoholism, Advanced Analysis of the Development of Alcohol Problems, University of California, Los Angeles, August 2001 – December 2007.

Co-Principal Investigator for the University of South Florida subcontract (NIMH/NIDA), Design and Analysis for Mental Health Preventive Trials. September 1999 – August 2009.

Study director for the Johns Hopkins University Prevention Research Center subcontract (NIMH), Follow up of Two Universal Preventive Interventions. August 2001 – June 2009.

Principal Investigator for the Alcoholic Beverage Medical Research Foundation grant, Studying Transitions in Alcohol Use: Growth Mixture Modeling on the National

Longitudinal Survey of Youth, University of California, Los Angeles, June 1998 – December 1999.

Study director for the Johns Hopkins University Prevention Research Center subcontract, Epidemiologic Center for Early Risk Behaviors, University of California, Los Angeles, August 1997 – August 2000.

Principal Investigator for the National Institute on Alcohol Abuse and Alcoholism grant, Alcohol Problem Trajectories in Young Adults: The NLSY, University of California, Los Angeles, January 1997 – December 1999.

Independent Scientist Award (Research Scientist Development Award; K02), National Institute on Alcohol Abuse and Alcoholism, Advanced Analysis of the Development of Alcohol Problems, University of California, Los Angeles, August 1996 – July 2001.

Study director for the Office of Educational Research and Improvement grant to the UCLA National Center for Student Testing, Evaluation and Standards, Validity of Measures of Progress, University of California, Los Angeles, January 1996 – December 1999.

Statistical researcher on the National Institute on Alcohol Abuse and Alcoholism, Research Institute on Addictions (Buffalo, NY) contract "Epidemiology of Alcoholism in Untreated and Treated Populations - Research Component I: Case-Control Path Analysis," (Principal Investigator: Marcia Russell), February 1995 - July 1995.

Senior statistician and Co-principal investigator on the National Institute on Alcohol Abuse and Alcoholism SBIR contract "Tailoring Psychometric Techniques for Epidemiological and Clinical Applications," Phase I and Phase II (Principal Investigator: Linda Muthén), August 1994 - April 1998.

Statistical researcher on the National Institute of Mental Health grant, Designs and Analyses for Mental Health Preventive Trials, Prevention Science Methodology Group, University of South Florida (Principal Investigator: C. Hendricks Brown), January 1994 - present.

Study director for the University of Gothenburg project "Algorithms and Procedures for Multilevel Multivariate Analysis," University of California, Los Angeles, September 1994 - December 1995.

Study director for the National Center for Education Statistics project, Analytical Aspects of Opportunity-to-Learn, a subproject within the NCES contract "Assessing the Validity of the National Assessment of Educational Progress," University of California, Los

Angeles (Principal Investigators: Eva Baker and Robert Linn), January 1994 - January 1995.

Statistical researcher on the National Institute on Alcohol Abuse and Alcoholism grant, Women, men, and alcohol: General population differences, Columbia University (Principal Investigator: Deborah Hasin), June 1994 - present.

Statistical consultant on the National Institute on Alcohol Abuse and Alcoholism grant, The epidemiology of alcoholism in untreated and treated populations, Research Institute on Addictions, SUNY-Buffalo (Principal Investigator: Marcia Russell), June 1994 - present.

Principal Investigator for the Office of Naval Research grant, Psychometric Developments related to Tests and Selection, University of California, Los Angeles, May 1993 - December 1996.

Statistical researcher on the Swedish Tercentenary Foundation grant, Multivariate Analysis of Literacy, University of Umea and Stockholm (Principal investigators: I. Lundberg and I. Munck, January 1993 - present.

Study director for the Office of Educational Research and Improvement project Analytical Models to Monitor Status and Progress of Learning and Performance and their Antecedents, a sub-project within the OERI five-year grant, "Center for Student Testing, Evaluation, and Standards," University of California, Los Angeles, December 1990 - 1995.

Principal Investigator for the National Institute on Alcohol Abuse and Alcoholism grant, Psychometric Advances for Alcohol and Depression Studies, University of California, Los Angeles, June 1990 - May 1994.

Senior Statistician for the National Institute on Alcohol Abuse and Alcoholism project, Statistics and Software for Complex Sample Surveys, Los Angeles, California, August 1990 - January 1991.

Principal Investigator for the National Science Foundation grant, Psychometric Modeling in Heterogeneous Populations, University of California, Los Angeles, April 1989 - September 1991.

Principal Investigator for the National Institute on Alcohol Abuse and Alcoholism project, Advanced Statistical Modeling of the Alcohol Data from the National Health Interview Survey (NHIS), August 1989 - April 1990.

Statistical consultant for the Law School Admission Council contract, LSAC Bar Passage Study, University of Massachusetts (Principal Investigator: H. Swaminathan), 1991-94

Statistical consultant for the National Institute of Mental Health grant, Analyses of the NIMH Epidemiological Catchment (ECA) Area Program, Johns Hopkins University (Principal Investigator: William W. Eaton), August 1988 - present.

Statistical consultant for the National Institute of Drug Abuse grant, Epidemiology of Adult Cocaine Use, Johns Hopkins University (Principal Investigators: S. Kellam, J. Anthony, C. H. Brown, and L. Dolan), August 1989 - present.

Member of the Advisory Board for the National Institute of Drug Abuse grant, The Dynamics of Deviant Behavior - A National Survey, Institute of Behavioral Science, University of Colorado at Boulder (Principal Investigator: D. Elliott), August 1989 - July 1992.

Co-Principal Investigator (with R. Shavelson) for the Graduate Management Admission Council contract, The Relationship Between Applicant Characteristics, School Attributes, and Student Outcomes, May 1986 - April 1990.

Study director for Instructionally Sensitive Psychometrics, a sub-project within the Office of Educational Research and Improvement five-year grant, "Center for Student Testing, Evaluation, and Standards," December 1985 - November 1990.

Principal Investigator for the National Science Foundation grant, Structural Equation Modeling with Non-Normal Data, University of California, Los Angeles, August 1983 - July 1985.

Statistical consultant for the National Institute of Mental Health grant, Modeling Television's Role in Affect Socialization, University of California, Los Angeles (Principal Investigator: Professor Aimee Dorr), August 1983 - July 1987, July 1989 - June 1990.

Research Statistician for the National Institute of Justice grant, Developing Causal Models with Discrete Variables and Selective Samples for Criminology, University of California, Los Angeles (Principal Investigator: Professor Peter M. Bentler; grant proposal author: Dr. Bengt Muthén), May 1981 through May 1982.

Research Statistician with the Swedish Social Science Research Council, January 1981 through December 1981.

Researcher with the Swedish Social Science Research Council project, Analysis of Contingency Tables, University of Uppsala, (Director: Dr. Bengt Muthén, July 1979 through December 1980, thereafter merged with the project above).

Research Associate within the Bank of Sweden Tercentenary Foundation project, Methodology of Evaluation, University of Uppsala (Director: Professor Karl G. Joreskog), January 1979 through December 1980.

Research Associate within the Bank of Sweden Tercentenary Foundation project, Structural Equation Models in the Social Sciences, University of Uppsala (Director: Professor Karl G. Joreskog), January 1976 through December 1978.

Research Associate within the Swedish Social Science Research Council project, Structural Equation Models with Qualitative Variables, University of Uppsala (Director: Professor Karl G. Joreskog), August 1975 through December 1975 (thereafter merged with the project above).

Research Assistant within the Bank of Sweden Tercentenary Foundation project, Factor Analysis of Dichotomous Variables, University of Uppsala (Director Professor A. Christoffersson), January 1978 through September 1973. FORTRAN IV computer programming.

#### WORKSHOPS/TRAINING SESSIONS

Mplus Short Courses, Johns Hopkins University, March 24-25, 2011

Mplus Short Course and Latent Variable Symposium, Taiwan, January 9-11, 2011

Mplus Short Courses, Johns Hopkins University, August 16-18, 2010

Mplus Short Courses, IDEC-Universitat Pompeu Fabra, Barcelona, Spain, May 31- June 1, 2010

Mplus Short Courses, Johns Hopkins University, March 22-23, 2010

Mplus Short Courses, Johns Hopkins University, August 20-21, 2009

Lecturer at the 2-day workshops “Mixture (Latent Class) Modeling And Multilevel Modeling”, Freie Universitat Berlin, Germany, July 17-18 and 20-21, 2009.

Lecturer at the 2-day workshop, “Topics 7 And 8”, John Hopkins University, Baltimore, MD, March 17-18, 2009.

Lecturer at the 2-day workshop, “Topics 5 And 6”, University of Michigan, Ann Arbor, MI, November 10-11, 2008.

Lecturer at the 2-day workshop, “Topics 3 And 4”, John Hopkins University, Baltimore, MD, August 21-22, 2008.

Lecturer at the 1-day workshop, “Advanced Latent Variable Mixture Modeling Using Mplus”, Durham, NH, June 29, 2008.

Lecturer at the 2-day workshop, “Mplus Short Courses”, John Hopkins University, Baltimore, MD, March 18-19, 2008.

Lecturer at the 1-day workshop, “Multilevel Modeling In Mplus Including New Methods In Mplus Version 5”, London, England, December 4, 2007.

Lecturer at the 3-day workshop, “Mplus Short Courses”, John Hopkins University, Baltimore, MD, August 20-22, 2007.

Lecturer at the 1-day workshop, “Analysis Of Preventive Intervention Data Using Mixture Modeling In Mplus”, Washington DC, May 29, 2007.

Lecturer at the half-day workshop, “Growth Modeling Applications In Mplus”, Washington DC, May 27, 2007.

Lecturer at the 1-day workshop, “Multilevel Structural Equation Modeling”, University of Utrecht, the Netherlands, April 15, 2007.

Lecturer at the 1-day workshop, “Statistical Analysis Using The General Latent Variable Framework Of Mplus”, UCLA, Los Angeles, CA, March 31, 2007.

Lecturer at the 2-day workshop, “Mplus Short Courses”, John Hopkins University, Baltimore, MD, March 13-14, 2007.

Lecturer at the 1-day workshop “Latent Variable Mixture Modeling Using Mplus”, Atlanta, GA, March 11, 2007.

Lecturer at the 2-day workshop “Cross-Sectional And Longitudinal Latent Variable Mixture Modeling”, Montreal, Canada, October 23-24, 2006.

Lecturer at the 1-day workshop “New Longitudinal Analysis Techniques Using Mplus”, UCLA, Los Angeles, CA, August 16, 2006.

Lecturer at the 3-day workshop “Mplus Course in Europe”, June 28-30, 2006.



Lecturer at the 1-day pre-conference workshop “Mixture Modeling in Mplus”, University of Maryland, May 17, 2006.

Lecturer at the 1-day presentation “Beyond Conventional HLM”, American Educational Research Association, San Francisco, CA, April 8, 2006.

Lecturer at the 5-day workshop “Mplus Short Courses” Alexandria, VA, November 7-11, 2005.

Lecturer at the 2-day workshop “Multilevel Modeling”, John Hopkins University in Baltimore, MD, March 17-18, 2005.

Lecturer at the 5-day workshop “Mplus Short Courses” Alexandria, VA, November 8-12, 2004.

Lecturer at the 1-day workshop “General Latent Variable Modeling Using Mplus Version 3”, Jena, Germany, July 22, 2004.

Lecturer at the 5-day workshop “Latent Variable Modeling Using Mplus”, Alexandria, Virginia, November 3-7, 2003.

Lecturer at the 4-day workshop “Latent Variable Modeling Using Mplus”, Fulda, Germany, January 8-11, 2003.

Lecturer at the 4-day workshop “Latent Variable Modeling Using Mplus”, Washington DC, September 17-20, 2002.

Lecturer at the 4-day workshop “Latent Variable Modeling Using Mplus”, Santa Monica, CA, November 5-8, 2001.

Lecturer at the 2-day workshop “Longitudinal Modeling with Mplus”, Johns Hopkins University, June 2001.

Lecturer at the 3-day Summer Institute on Longitudinal Methods, “Longitudinal Modeling with Mplus”, Penn State University, May 2001.

Lecturer at the 4-day workshop “Latent Variable Modeling Using Mplus”, Boston, March 2001.

Lecturer at the 4-day workshop “Latent Variable Modeling Using Mplus”, Nottingham, England, September 2000.

Lecturer at the Joint Statistical Meetings Computer Technology Workshop “Growth Mixture Modeling Using The Mplus Program”, Indianapolis, Indiana, August 2000.

Lecturer at the one-day pre-session of the annual meeting of the Research Society on Alcoholism, Denver, June 2000.

Lecturer at the 2-day American Educational Research Association pre-session “Analysis of Longitudinal Data Using Mplus”, New Orleans, March 2000.

Lecturer at the 3-day workshop “Latent Variable Modeling Using Mplus”, Amsterdam, the Netherlands, March 2000.

Lecturer at the 3-day workshop “Latent Variable Modeling Using Mplus”, Bethesda, Maryland, March 2000.

Lecturer at the one-day pre-session of the annual meeting of the Research Society on Alcoholism, Santa Barbara, June 1999.

Lecturer at the invited 2-day pre-session of the annual meeting of the Society for Prevention Research, New Orleans, June 1999.

Lecturer at the UCLA Advanced Methods Institute 3-day workshop “Analysis of Longitudinal Data: Growth Modeling Using Latent Variables,” Los Angeles, June 1999.

Lecturer at the invited workshop for the Swedish Council for Planning and Coordination of Research (FRN), “Analysis of Longitudinal Data: Growth Modeling Using Latent Variables”, Stockholm, Sweden, August 1998.

Lecturer at the invited workshop for the Research Society on Alcoholism, “Statistical Growth Curve Analysis”, Hilton Head Island, South Carolina, June 1998.

Lecturer at the invited workshop for the Society for Prevention Research, “Growth Modeling for Prevention Trials”, Park City, Utah, June 1998.

Lecturer at the invited workshop for the Fifth Biennial Conference on Community Research and Action, “General Growth Modeling for Prevention Studies,” Chicago, Ill., June 1995.

Lecturer at the invited workshop for the Research Society on Alcoholism, “Longitudinal Analysis of Alcohol use: Applying Psychometric Methodology in Epidemiology,” Maui, Hawaii, June, 1994.

Lecturer at the American Educational Research Association one-day pre-session, "Advances in Latent Variable Modeling with Longitudinal, Missing, and Multilevel Data," New Orleans, LA, April, 1994.

Lecturer at the 3-day workshop "Latent and Causal Modelling in Clinical, Epidemiological and Social Science Research," Ateliers de Formation, INSERM, Sainte-Germain-En-Laye, France, October 18-20, 1993.

Lecturer at the 2-day workshop "Hierarchical Modeling of IEA Reading Literacy," Department of Education, University of Gothenburg, Sweden, March 3-4, 1993.

Lecturer at a 5-day training session, "Structural Modeling with Categorical and Other Non-Normal Data Using LISCOMP", Survey Research Center, Institute of Social Research, the University of Michigan, Ann Arbor, Michigan, 1991.

Lecturer at a two-day training session, "Advanced Uses of Structural Modeling: Applying LISCOMP to Categorical and Other Non-normal Data," Zentrum Fur Umfragen, Methoden, Und Analysen (ZUMA), Mannheim, West Germany, 1989.

Lecturer at a two-day training session, "Advanced Uses of Structural Modeling: Applying LISCOMP to Categorical and Other Non-normal Data," University of Maryland, 1989.

Lecturer at a two-day training session, "Advanced Uses of Structural Modeling: Applying LISCOMP to Non-normal Data," University of Indiana, 1988.

Lecturer at the American Educational Research Association two-day pre-session, "Advances in Factor Analysis and Structural Equation Modeling with Non-normal Data," New Orleans, LA, 1988.

Lecturer at a two-day training session, "Advanced Uses of Structural Modeling: Applying LISCOMP to Non-normal Data," Johns Hopkins University, 1987.

Lecturer at the American Educational Research Association two-day pre-session, "Advances in Factor Analysis and Structural Equation Modeling with Non-normal Data," Washington, D.C., 1987.

Lecturer at the one-day training session, "Advances in Factor Analysis and Structural Equation Modeling with Non-normal Data," University of Wisconsin-Madison, 1987.

Lecturer at the American Educational Research Association one-day pre-session, "Advances in Factor Analysis and Structural Equation Modeling with Non-normal Data," Chicago, 1985.

Lecturer at the training session, "Introduction to Structural Equation Modeling," at the California Educational Research Association Conference, San Diego, 1985.

Panel member of a tutorial workshop in statistical methods, "Uses and Abuses of Causal Models," organized by the National Institute of Mental Health, Washington, D.C., July 18-19, 1983, in order to guide NIMH funded investigators.

Lecturer at the American Educational Research Association Research Training Minicourse, "Advances in Factor Analysis and Structural Equation Modeling with Categorical Data," Montreal, Canada, April 11-15, 1983.

Lecturer at a five-day training session, "Analysis of Categorical Data," Universidad de los Andes, Merida, Venezuela, December 1982.

Adjunct Lecturer of a graduate course, "Special Problems in Psychological Statistics: Structural Models for Categorical Data," Department of Psychology, UCLA, Spring quarter, 1982.

Lecturer in three-day Boston University workshops, "Advances in Market Segmentation" (log-linear models, factor analysis), in September and November 1981.

Teacher of a graduate course on the analysis of categorical data (log-linear and logistic models latent trait models, latent structure analysis, factor analysis) at the Department of Statistics, University of Uppsala, 1979.

Teacher of a graduate course in multivariate statistics for psychologists at the University of Stockholm, 1978, 1979.

Teacher at the four-day Training Session, "Factor Analysis, Covariance, Structure Analysis, Path Analysis, and Structural Equation Models" (with Professor Karl G. Joreskog and Dr. Dag Sorbom), University of Uppsala, 1978.

Teacher of undergraduate courses in statistics at the University of Uppsala, 1971-1973.

## STATISTICAL COMPUTER PROGRAM INVOLVEMENT

Mplus – Version 6, April 2010

Statistical analysis with latent variables.

Mplus - Version 1, November 1998

Second-generation structural equation modeling with a combination of categorical and continuous latent variables.

LISCOMP - Version 1.1, September 1987

General structural equation modeling with dichotomous, ordered, categorical, and continuous latent variable indicators; performs univariate and bivariate probit and tobit regression, computes tetrachoric, polychoric polychoric correlations, performs exploratory and confirmatory factor analysis, performs simultaneous equation modeling, performs general structural equation modeling in one or several groups.

### PUBLISHED PAPERS

Muthén, B., Asparouhov, T., Hunter, A. & Leuchter, A. (2011). Growth modeling with non-ignorable dropout: Alternative analyses of the STAR\*D antidepressant trial. Psychological Methods, 16, 17-33.

Muthén, B. & Asparouhov, T. (2011). Beyond multilevel regression modeling: Multilevel analysis in a general latent variable framework. In J. Hox & J.K. Roberts (eds), Handbook of Advanced Multilevel Analysis, pp. 15-40. New York: Taylor and Francis.

Muthén, B., Brown, C.H., Hunter, A., Cook, I.A. & Leuchter, A.F. (2011). General approaches to analysis of course: Applying growth mixture modeling to randomized trials of depression medication. In P.E. Shrout (ed.), Causality and Psychopathology: Finding the Determinants of Disorders and their Cures (pp. 159-178). New York: Oxford University Press.

Henry, K. & Muthén, B. (2010). Multilevel latent class analysis: An application of adolescent smoking typologies with individual and contextual predictors. Structural Equation Modeling, 17, 193-215.

Hunter, A. M., Muthén, B.O., Cook, I.A. & Leuchter, A. F. (2010). Antidepressant response trajectories and quantitative electroencephalography (QEEG) biomarkers in major depressive disorder. Journal of Psychiatric Research.

Marsh, H. W., Lüdtke, O., Muthén, B., Asparouhov, T., Morin, A. J. S., Trautwein, U. & Nagengast, B. (2010). A new look at the big-five factor structure through exploratory structural equation modeling. Psychological Assessment, 22, 471-491.

- Asparouhov, T. & Muthén, B. (2009). Exploratory structural equation modeling. Structural Equation Modeling, 16, 397-438.
- Muthén, B. & Brown, H. (2009). Estimating drug effects in the presence of placebo response: Causal inference using growth mixture modeling. Statistics in Medicine, 28, 3363-3385.
- Muthén, B. & Asparouhov, T. (2009). Multilevel regression mixture analysis. Journal of the Royal Statistical Society, Series A, 172, 639-657.
- Kim, Y.K. & Muthén, B. (2009). Two-part factor mixture modeling: Application to an aggressive behavior measurement instrument. Structural Equation Modeling, 16, 602-624.
- Uher, R., Muthén, B., Souery, D., Mors, O., Jaracz, J., Placentino, A., Petrovic, A., Zobel, A., Henigsberg, N., Rietschel, M., Aitchison, K., Farmer, A. & McGuffin, P. (2009). Trajectories of change in depression severity during treatment with antidepressants. Psychological Medicine, published online October 29, 2009.
- Kerner, B. & Muthén, B. (2009). Growth mixture modelling in families of the Framingham Heart Study. BMC Proceedings, 3, 1-5.
- Marsh, H.W., Muthén, B., Asparouhov, A., Lüdtke, O., Robitzsch, A., Morin, A.J.S., & Trautwein, U. (2009). Exploratory structural equation modeling, integrating CFA and EFA: Application to students' evaluations of university teaching. Structural Equation Modeling, 16, 439-476.
- Muthén, B. & Asparouhov, T. (2009). Growth mixture modeling: Analysis with non-Gaussian random effects. In Fitzmaurice, G., Davidian, M., Verbeke, G. & Molenberghs, G. (eds.), Longitudinal Data Analysis, pp. 143-165. Boca Raton: Chapman & Hall/CRC Press.
- Asparouhov, T. & Muthén, B. (2008). Multilevel mixture models. In Hancock, G. R., & Samuelsen, K. M. (Eds.), Advances in latent variable mixture models, pp. 27-51. Charlotte, NC: Information Age Publishing, Inc.
- Boscardin, C., Muthén, B., Francis, D. & Baker, E. (2008). Early identification of reading difficulties using heterogeneous developmental trajectories. Journal of Educational Psychology, 100, 192-208.
- Brown, C., Wang, W., Kellam, S., Muthén, B., Petras, H., Toyinbo, P., Poduska, J., Ialongo, N., Wyman, P., Chamberlain, P., Sloboda, Z., MacKinnon, D., Windham, A., & PSMG. (2008). Methods for testing theory and evaluating impact in randomized field trials: Intent-to-treat analyses for integrating the perspectives of person, place, and time. Drug and Alcohol Dependence, 95(S1), S74-S104.

- Petras, H., Kellam, S., Brown, C., Muthén, B., Ialongo, N., Poduska, J. (2008). Developmental epidemiological courses leading to antisocial personality disorder and violent and criminal behavior: Effects by young adulthood of a universal preventive intervention in first- and second-grade classrooms. Drug and Alcohol Dependence, 95(S1), S45-59.
- Jo, B., Asparouhov, T. & Muthén, B. (2008). Intention-to-treat analysis in cluster randomized trials with noncompliance. Statistics in Medicine, 27, 5565-5577.
- Jo, B., Asparouhov, T., Muthén, B., Ialongo, N. & Brown, H. (2008). Cluster randomized trials with treatment noncompliance. Psychological Methods, 13, 1-18.
- Kreuter, F. & Muthén, B. (2008). Longitudinal modeling of population heterogeneity: Methodological challenges to the analysis of empirically derived criminal trajectory profiles. In Hancock, G. R., & Samuelsen, K. M. (Eds.), Advances in latent variable mixture models, pp. 53-75. Charlotte, NC: Information Age Publishing, Inc.
- Kreuter, F. & Muthén, B. (2008). Analyzing criminal trajectory profiles: Bridging multilevel and group-based approaches using growth mixture modeling. Journal of Quantitative Criminology, 24, 1-31.
- Lüdtke, O., Marsh, H.W., Robitzsch, A., Trautwein, U., Asparouhov, T., & Muthén, B. (2008). The multilevel latent covariate model: A new, more reliable approach to group-level effects in contextual studies. Psychological Methods, 13, 203-229.
- Muthén, B. (2008). Latent variable hybrids: Overview of old and new models. In Hancock, G. R., & Samuelsen, K. M. (Eds.), Advances in latent variable mixture models, pp. 1-24. Charlotte, NC: Information Age Publishing, Inc.
- Asparouhov, T. & Muthén, B. (2007). Testing for informative weights and weights trimming in multivariate modeling with survey data. Proceedings of the 2007 JSM meeting in Salt Lake City, Utah, Section on Survey Research Methods.
- Asparouhov, T. & Muthén, B. (2007). Computationally efficient estimation of multilevel high-dimensional latent variable models. Proceedings of the 2007 JSM meeting in Salt Lake City, Utah, Section on Statistics in Epidemiology.
- Boomsma, D., Cacioppo, J., Muthén, B., Asparouhov, T. & Clark, S. (2007). Longitudinal genetic analysis for loneliness in Dutch twins. Twin Research and Human Genetics, 10, 267-273.

- Grant, B., Harford, T., Muthén, B., Yi, H., Hasin, D., & Stinson, F. (2007). DSM-IV alcohol dependence and abuse: Further evidence of validity in the general population. Drug and Alcohol Dependence, 86(2-3), 154-166.
- Lubke, G. & Muthén, B. (2007). Performance of factor mixture models as a function of model size, covariate effects, and class-specific parameters. Structural Equation Modeling, 14(1), 26–47.
- Lubke, G., Muthén, B., Moilanen, I., McGough, J., Loo, S., Swanson, J., Yang, M., Taanila, A., Hurtig, T., Jarvelin, M. & Smalley, S. (2007). Subtypes versus severity differences in the Attention-Deficit/Hyperactivity disorder in the northern Finnish birth cohort. Journal of the American Academy of Child and Adolescent Psychiatry, 46, 1584-1593.
- Nylund, K.L., Asparouhov, T., & Muthen, B. (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.
- Klein, A. & Muthén, B. (2007). Quasi-maximum likelihood of structural equation modeling with multiple interaction and quadratic effects. Multivariate Behavioral Research, 42, 647-673.
- Asparouhov, T. & Muthen, B. (2006). Multilevel modeling of complex survey data. Proceedings of the Joint Statistical Meeting in Seattle, August 2006. ASA section on Survey Research Methods, 2718-2726.
- Asparouhov, T., Masyn, K. & Muthen, B. (2006). Continuous time survival in latent variable models. Proceedings of the Joint Statistical Meeting in Seattle, August 2006. ASA section on Biometrics, 180-187.
- Muthén, B. (2006). Should substance use disorders be considered as categorical or dimensional? Addiction, 101, 6-16.
- Muthén, B. & Asparouhov, T. (2006). Item response mixture modeling: Application to tobacco dependence criteria. Addictive Behaviors, 31, 1050-1066.
- Muthén, B., Asparouhov, T. & Rebollo, I. (2006). Advances in behavioral genetics modeling using Mplus: Applications of factor mixture modeling to twin data. Twin Research and Human Genetics, 9, 313-324.
- Muthén, B. (2006). The potential of growth mixture modelling. Commentary. Infant and Child Development, 15, 623-625.
- Klein, A. & Muthén, B. (2006). Modeling heterogeneity of latent growth depending on initial status. Journal of Educational and Behavioral Statistics, 31, 357-375.



- Lubke, G.H. & Muthén, B. (2005). Investigating population heterogeneity with factor mixture models. Psychological Methods, 10, 21-39.
- Muthén, B. & Masyn, K. (2005). Discrete-time survival mixture analysis. Journal of Educational and Behavioral Statistics, 30(1), 27-58.
- Clark, D., Birmaher, B., Axelson, D., Monk, K., Kalas, C., Ehmann, M., Bridge, J., Wood, S., Muthén, B., & Brent, D. (2005). Fluoxetine for the Treatment of Childhood Anxiety Disorders: Open-Label, Long-Term Extension to a Controlled Trial. Journal of the American Academy of Child & Adolescent Psychiatry, 44, 1263-1270.
- Muthén, B. (2004). Latent variable analysis: Growth mixture modeling and related techniques for longitudinal data. In D. Kaplan (ed.), Handbook of quantitative methodology for the social sciences. Newbury Park, CA: Sage Publications, pp. 345-368.
- van Lier, P.A.C., Muthén, B., van der Sar, R.M. & Crijnen, A.A.M. (2004). Preventing disruptive behavior in elementary schoolchildren: Impact of a universal classroom-based intervention. Journal of Consulting and Clinical Psychology, 72, 467-478.
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