

Gitta H. Lubke

Mailing Address

University of Notre Dame Department of Psychology 118 Haggar Hall Notre Dame IN 46556

Higher Education

PhD, Psychometrics, April 2002VU University Amsterdam, The NetherlandsMA (cum laude), August 1997University of Amsterdam, The Netherlands

Positions

Associate Professor, Department of Psychology, University of Notre Dame, 2008-ongoing
Visiting Professor, Biological Psychology, VU University Amsterdam, 2010-ongoing
John Cardinal O'Hara, C.S.C. Assistant Professor, Department of Psychology, University of Notre Dame, 2004-2008
Assistant Professor, Department of Psychiatry, VIPBG Virginia Commonwealth University, 2003-2004
Research Associate, Graduate School of Education & Information Studies UCLA, 2001- 2003, Supervisor: Bengt Muthén

Distinctions, Honors, Awards

2009 Tanaka Award, most outstanding paper published in Multivariate Behavioral Research in 2008, entitled "Distinguishing between latent classes and continuous factors with categorical outcomes: Class invariance of parameters of factor mixture models"
2007 Cattell Award, Outstanding Early Career Contributions to Multivariate Psychology, Society of Multivariate Experimental Psychology

Publications

Walters R, Laurin C, Lubke GH (submitted) An Integrated Approach to Reduce the Impact of Minor Allele Frequency and Linkage Disequilibrium on Variable Importance Measures for Genome-Wide Data

Lubke GH, Tueller S (submitted). Fitting complex growth mixture models.

- Lubke GH, Laurin⁻C, Walters R, Eriksson N, Hysi P, Spector TD, Montgomery GW, Boomsma DI, Martin ND, Medland SE (submitted). Boosting SNP selection: an illustration of a 2-step GWAS using simulated and hair morphology data.
- Tueller S, Lubke GH (submitted) Estimating Classification Accuracy for Latent Variable Mixture Models.
- Lubke GH, Hottenga JJ, Walters R, Laurin⁻C, de Geus EJC, Willemsen G, Smit HJ, Middeldorp C, Penninx BWJH, Vink J, Boomsma DI (in press). Estimating the genetic variance of Major Depressive Disorder (MDD) due to all SNPs. *Biological Psychiatry*

- Lubke GH, Stephens SH, Lessem JM, Hewitt JK, Ehringer MA (2012) The CHRNA5/A3/B4 gene cluster and tobacco, alcohol, cannabis, inhalants, and other substance use initiation: Replication and new findings using mixture analyses. *Behavior Genetics.* 2012 Mar 1. [Epub ahead of print] PMID: 22382757
- Gillespie NA, Lubke GH, Gardner CO, Neale MC, Kendler KS. Two-part random effects growth modeling to identify risks associated with alcohol and cannabis initiation, initial average use and changes in drug consumption in a sample of adult, male twins. *Journal of Drug and Alcohol Dependence*. 2011 Dec 14. [Epub ahead of print] PMID: 22177896
- Robbers SC, van Oort FV, Polderman TJ, Bartels M, Boomsma DI, Verhulst FC, Lubke GH, Huizink AC (2011). Trajectories of CBCL Attention Problems in Childhood, European Child & Adolescent Psychiatry, 20(8): 419-27. Epub 2011 Jun 29. PMID: 21713506
- Lu ZL, Zhang Z, Lubke GH (2011). Bayesian Inference For Growth Mixture Models With Latent-Class-Dependent Missing Data. *Multivariate Behavioral Research*, 46:567-597.
- Distel MA, Carlier A, Middeldorp CM, Derom CA, Lubke GH, Boomsma DI. (2011). Borderline personality traits and adult attention-deficit hyperactivity disorder symptoms: A genetic analysis of comorbidity. Am J Med Genet Part B 156:817–825. PMID: 21812103
- Tueller S, Drotar S, Lubke GH (2011). Addressing the problem of switched class labels in latent variable mixture model simulations studies. *Structural Equation Modeling* 18:110-131.
- Lubke, GH, Tueller, S. (2010). Latent class detection and class assignment: A comparison of taxometric and factor mixture modeling approaches. *Structural Equation Modeling* 17: 605-628.
- Tueller S, Lubke GH (2010). Evaluation of structural equation mixture models: Parameter estimates and correct class assignment. *Structural Equation Modeling*, 17:165-192. PMID: 20582328
- Lubke GH (2010). Latent variable mixture modeling. In GR Hancock & RO Mueller (Eds.), The Reviewer's Guide to Quantitative Methods in the Social Sciences. New York, NY: Routledge. 283-297
- Lubke G.H., Hudziak J.J., Derks E.M., van Bijsterveldt T.C.E.M., Boomsma D.I. (2009). Maternal ratings of attention problems and the relation to DSM-IV ADHD: Evidence for the existence of a continuum. *Journal of the American Academy of Child & Adolescent Psychiatry.* 48:1085-1093. PMID: 19797980
- Lubke, G.H., & Neale, M.C. (2008). Distinguishing between latent classes and continuous factors with categorical outcomes: Class invariance of parameters of factor mixture models. *Multivariate Behavioral Research*, 43:592-620. PMID: 20165736
- Lubke, G.H. & Spies, J. (2008). Choosing a 'correct' factor mixture model: Power, limitations, and graphical data exploration. In G. R. Hancock & K. M. Samuelsen (Eds.), Advances in latent variable mixture models. Charlotte, NC: Information Age Publishing, 343-362.
- Lubke, G.H., Muthén, B.O, Moilanen, I.K, McGough, J.J., Loo, S.K., Swanson, J. M., Yang, M. H., Taanila, A., Hurtig, T., Jarvelin, M.-R., & Smalley, S.L. (2007). Subtypes vs. severity differences in Attention Deficit Hyperactivity Disorder in the Northern Finnish Birth Cohort (NFBC). *Journal of the American Academy of Child & Adolescent Psychiatry, 46*, 1584-1593.
- Keller, P. S., Cummings, E.M., Davies, P.T., & Lubke, G.H. (2007). Children's behavioral reactions to marital conflict as a function of parents' conflict behaviors and alcohol problems. *European Journal of Developmental Psychology*, *4*, 157-177.
- Lubke, G.H. & Muthén, B.O. (2007). Performance of factor mixture models as a function of covariate effects, model size, and class-specific parameters. *Structural Equation Modeling* 14, 26-47.
- Lubke, G.H., & Neale, M.C. (2006). Distinguishing between latent classes and continuous factors: Resolution by maximum likelihood? *Multivariate Behavioral Research,41,* 499-532.

Pressman, L.J., Loo, S.K., Carpenter, E.M., Asarnow, J. Lynn, D., McCracken, J. McGough, J., Lubke, G.H., Yang, M.H., & Smalley, S.L. (2006). Effects of family environment and parental psychopathology on impairment in ADHD. *Journal of the American Academy of Child & Adolescent Psychiatry*, *45*, 345-354.

Neale, M. C, Lubke, G.H., Aggen, S. H. & Dolan, C.V. (2005). Problems with using sum scores for estimating variance components: Contamination and measurement non-invariance. *Twin Research & Human Genetics, 16*, 553-568.

Lynn, D.E., Lubke, G.H., Yang, M., McCracken, J.R., Gough, J., & Smalley, S. (2005). Temperament and character profiles and the dopamine D4 receptor gene in ADHD. *The American Journal of Psychiatry, 162*, 906-914.

Dolan, C.V., Schmittmann, V.D., Lubke, G.H., & Neale, M. C. (2005). Regime switching in the latent growth curve model. *Structural Equation Modeling*, *12*, 94-119.

Lubke, G.H. & Muthén, B.O. (2005). Investigating population heterogeneity with factor mixture models. *Psychological Methods*, 10, 21-39.

Lubke, G.H. & Muthén, B.O. (2004). Applying multi-group confirmatory factor models for continuous outcomes to Likert scale data complicates meaningful group comparisons. *Structural Equation Modeling*, *11*, 514-534.

Lubke, G.H., Neale, M.C., & Dolan, C.V. (2004). Implications of absence of measurement invariance for detecting sex limitation and genotype by environment interaction. *Twin Research*, *7*, 292 - 298.

Lubke, G.H., Dolan, C.V. & Kelderman, H., & Mellenbergh, G.J. (2003). The relation between sources of within- and between-group differences and measurement invariance in the context of the common factor model. *Intelligence*, *173*, 1-24.

Lubke, G.H., Dolan, C.V., & Kelderman, H. (2003). Weak measurement invariance with respect to unmeasured variables: An implication of strict factorial invariance. *British Journal of Mathematical and Statistical Psychology*, *56*, 231-248.

Lubke, G.H. & Dolan, C.V. (2003). Can differences in residual variances across groups mask differences in residual means in the common factor model? *Structural Equation Modeling*, 10, 175-192.

Kerssens, C., Lubke, G.H., Klein, J., van der Woerd, A., & Bonke, B. (2002). Memory function during propofol/alfentanil anesthesia: Predictive value of individual differences. *Anesthesiology*, *97*, 382-389.

Lubke, G.H., Dolan, C.V., & Kelderman, H. (2001). Investigating group differences using Spearman's Hypothesis: An evaluation of Jensen's method. *Multivariate Behavioral Research*, *36*, 299-324.

Dolan, C.V. & Lubke, G.H. (2001). Viewing Spearman's Hypothesis from the perspective of multi-group PCA: A comment on Schönemann's criticism. *Intelligence*, *29*, 231-245.

Lubke, G.H., Kerssens, C., Gershon, R.Y., & Sebel, P.S. (2000). Memory formation during general anesthesia for emergency cesarean sections. *Anesthesiology*, *92*, 1029-1037.

Lubke, G.H. & Sebel, P.S. (2000). Awareness and different forms of memory in trauma anesthesia. *Current Opinions in Anesthesiology*, *13*, 161-165.

Lubke, G.H., Kerssens, C., Phaf, R.H., & Sebel, P.S. (1999). Dependence of explicit and implicit memory on hypnotic state in trauma patients. *Anesthesiology*, *90*, 670-680.

Invited Lectures and Symposia

2010, Center for Integrated Latent Variable Research (CILVR), University of Maryland

2008, UBC/Georgetown University Medical Center

2008, Society of Multivariate Experimental Psychology, Montreal

2007, American Educational Research Association (AERA), Chicago

2007, American Psychological Association (APA), San Francisco 2006, Center for Integrated Latent Variable Research (CILVR), University of Maryland

<u>Grants</u>

<u>active</u>

- (1) DA-018673, NIDA, PI: Michael Neale, VCU, role: collaborator Psychometric and Genetic Assessments of Substance Abuse
- (2) 1RO1MH083830, PI Lee-Anna Clark, role: co-PI Validity & Clinical Utility of 2-Part System for Personality Disorder Diagnosis
- (3) 1 R01 AG02357-01-A1, NIA, PI: Cindy Bergeman, ND, role: CO-PI Notre Dame Study of Resiliency in Later Life
- (4) supplemental grant to NIA 1 R01 AG02357-A1-01, PI: C. S. Bergeman, role: CO-PI Notre Dame Study of Resiliency in Later Life
- (5) ISK/6827/VPP, Royal Netherlands Academy of Arts and Science, Visiting Professors Programme.

completed

- 1 R21 AG027360-01, NIA, PI: Gitta Lubke, ND Novel Methods to Assess Complex Developmental Changes
- (2) Emory Health Care System, internal research grant, PI: Dr. P. Sebel Memory during General Anesthesia

Professional Memberships

SMEP, Society of Multivariate Experimental Psychology ASHG, American Society of Human Genetics BGA, Behavior Genetics Association APA, American Psychological Association

Other: Service

Professiona	 Associate Editor Behavior Genetics Associate Editor Multivariate Behavioral Research Review Editor Frontiers in Genetics Member of the Editorial Board of Psychological Methods Member of the Editorial Board of Structural Equation Modeling Ad-hoc reviewer of the National Science Foundation (NFS, USA) Ad-hoc reviewer of The Royal Netherlands Academy of Arts and Sciences (KNAW, The Netherlands)
University	Program Director Quantitative Program (2011-ongoing) Director of PhD committee (S. Tueller) Director of Masters Thesis (D. Cisler) Member of PhD committees (X. Zhong. Z. Lu, P. Deboek, W. Zhang, C. Weaver, J. Rausch, L. Smith, E. Covey) Member of Masters committees (P. Deboek, X. Zhong, M. Yang) Graduate Committee (2011-ongoing) Publicity and Website Committee (2008-ongoing)

12/16/11