Curriculum Vitae

Zhiyong Johnny Zhang

May 2009

I. Basic Information

A. Education: Ph.D. in Quantitative Psychology, 2008, University of Virginia

B. Appointment: 2008-now Research Assistant Professor

C. Department of Psychology, 118B-Haggar Hall

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II. Research & Scholarship

A. Publications

1. **Zhang**, **Z.**, Davis, H. P., Salthouse, T. A., & Tucker-Drob, E. A. (2007). Correlates of individual, and age-related, differences in short-term learning. *Learning and Individual Differences*, *17*(3), 231–240.

2. **Zhang**, **Z.**, Hamagami, F., Wang, L., Grimm, K. J., & Nesselroade, J. R. (2007). Bayesian analysis of longitudinal data using growth curve models. *International Journal of Behavioral Development*, *31*(4), 374-383.

3. **Zhang**, **Z.**, & Nesselroade J. R. (2007). Bayesian estimation of categorical dynamic factor models. *Multivariate Behavioral Research*, *42*(4), 729-756.

4. **Zhang**, **Z.**, Hamaker, E. L., & Nesselroade, J. R. (2008). Comparisons of four methods for estimating dynamic factor models. *Structural Equation Modeling*, *15*(3), 377-402.

5. **Zhang**, **Z.**, McArdle, J. J., Wang, L., & Hamagami, F. (2008). A SAS interface for Bayesian analysis with WinBUGS. *Structural Equation Modeling*, *15*(4), 705–728.

6. Wang, L., **Zhang**, **Z.**, McArdle, J. J., & Salthouse, T. A. (2008). Investigating ceiling effects in longitudinal data analysis. *Multivariate Behavioral Research*, *43*(3), 476–496.

7. **Zhang**, **Z.**, & Wang, L. (2008). Methods for evaluating mediation effects: Rationale and comparison. In K. Shigemasu, A. Okada, T. Imaizumi, & T. Hoshino (Eds.), *New trends in psychometrics* (595-604), Tokyo: Universal Academy Press.

8. Hamaker, E. L., **Zhang**, **Z.**, & van der Maas, H. L. J. (in press). Dyads as dynamic systems: Using threshold autoregressive models to study dyadic interactions. *Psychometrika*.

9. Hamagami, F., **Zhang**, **Z.**, & McArdle, J. J. (in press). Modeling latent difference score models using Bayesian algorithms. In S.-M. Chow, E. Ferrer, & F. Hsieh (Eds), Statistical methods for modeling human dynamics: An interdisciplinary dialogue. New Jersey: Lawrence Erlbaum Associates.

10. Wang, L., **Zhang**, **Z.**, & Estabrook, R. (in press). Longitudinal mediation analysis of training intervention effects. In S.-M. Chow, E. Ferrer, & F. Hsieh (Eds), Statistical methods for modeling human dynamics: An interdisciplinary dialogue. New Jersey: Lawrence Erlbaum Associates.

11. **Zhang**, **Z.**, & Wang, L. (accepted). Statistical power analysis for growth curve models using SAS. *Behavior Research Methods*.

12. Winter, W. C., Hammond, W. R., **Zhang**, **Z.**, & Green, N. H. (accepted). Measuring circadian advantage in Major League Baseball: A 10-year retrospective study.

B. Software publications

1. **Zhang**, **Z.**, & Wang, L. (2008). BAUW as an OpenBUGS plugin, Version 1.0. Retrievable from http://bauw.psychstat.org

2. **Zhang, Z.,** & Wang, L. (2008). BMEM: Bootstrap Mediation analysis using EM algorithm, Version 2.0. Retrievable from http://medci.psychstat.org

3. **Zhang**, **Z.**, & Wang, L. (2007). MedCI: Mediation Confidence Intervals, Version 3.0. Retrievable from http://medci.psychstat.org

4. **Zhang, Z.**, & Wang, L. (2006). BAUW: Bayesian Analysis Using WinBUGS, Version 1.0. Retrievable from http://bauw.psychstat.org

5. **Zhang, Z.** (2006). LDSM: A C++ program for generating codes for analyzing latent difference score model in Mplus. Retrievable from http://www.psychstat.org/us/article.php/38

6. **Zhang, Z.**, & Nesselroade, J. R. (2005). Selection: A C++ program for analyzing selection effects. Retrievable from http://www.psychstat.org/us/article.php/64

7. **Zhang, Z.**, & Nesselroade, J. R. (2004). DFA: Dynamic Factor Analysis, Version 2.0. Retrievable from http://dfa.psychstat.org

C. Research grants

1. A course preparation grant from ISLA on *Introduction to Bayesian Methods* (Funded in October 2008), PI, $3,500.

2. Faculty Research Grants on *A general Bayesian estimation method for structural equation modeling* (2009-2010), PI, $10,000.

3. Seed Grants for Cooperative Projects: Research, *Daily religious research* (2009-2010), PI, $4,000.

III. Teaching

A. Spring 2009: PSY60108 Bayesian Statistics