

Jonathan L. Helm

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EDUCATION

- Ph.D., Quantitative Psychology,** 2013
University of California, Davis
Advisors: Emilio Ferrer, Kevin Grimm, & Keith Widaman
Dissertation: Modeling Change in a Correlation Over Time
- M.A., Quantitative Psychology,** 2010
University of California, Davis
Advisor: Emilio Ferrer
- B.S., Psychology,** 2008
University of California, Davis

ACADEMIC POSITIONS

- Lecturer & Post-Doctoral Researcher 2016-present
University of California, Davis
Advisors: Paul D. Hastings & Amanda Guyer
- Post-Doctoral Researcher 2014-2016
The Pennsylvania State University
Advisors: Pamela Cole & Nilam Ram
- Post-Doctoral Researcher 2013-2014
University of California, Davis
Advisors: Paul D. Hastings & Amanda Guyer

AWARDS AND HONORS

- Society for Multivariate Experimental Psychology
Dissertation Award (\$1000) 2012
- University of California Davis
Internal Fellowship (\$6000) 2012
- Society for Multivariate Experimental Psychology
Accepted poster presentation (\$900) 2012

PUBLICATIONS

Quantitative Publications

- Helm, J. L.**, Castro-Schilo, L., Oravec, Z. (*in press*). Comparing Bayesian and frequentist estimation of multi-trait multi-method confirmatory factor models. *Structural Equation Modeling*.
- Helm, J. L.** (*in press*). A review of latent variable modeling using R. *Structural Equation Modeling*. [Book review]
- Helm, J. L.**, Ram, N., Cole, P., Chow, S. M. (2016). Modeling self-regulation as a process using a multiple time-scale multiphase latent basis growth model. *Structural Equation Modeling*. doi: 10.1080/10705511.2016.1178580
- Serang, S.*, Zhang, Z., **Helm, J. L.**, Steele, J. S., Grimm, K. J. (2015). Evaluation of a Bayesian approach to estimating nonlinear mixed-effects mixture models. *Structural Equation Modeling*, 22, 202 – 215.
- Widaman, K. F., **Helm, J. L.** (2014). Factor analysis. In R. Cautin & S. Lilienfeld (Eds.), *The Encyclopedia of Clinical Psychology* (pp. 1223 - 1248). Hoboken, NJ: Wiley-Blackwell.
- Grimm, K. J., **Helm, J. L.** (2014). Latent class analysis and growth mixture models. In S.K. Whitbourne (Ed.), *The Encyclopedia of Adulthood and Aging* (pp. 731-737). Hoboken, NY: Wiley-Blackwell.
- Helm, J. L.**, Ferrer, E. (2013). Modeling Change in a Correlation Over Time Within a SEM Framework. *Multivariate Behavioral Research*, 48, 159. [Abstract]
- Ferrer, E., **Helm, J. L.** (2013). Dynamical systems modeling of physiological coregulation in dyadic interactions, *International Journal of Psychophysiology*, 88, 296 - 308.
- Widaman, K. F., **Helm, J. L.** (2012). Nocturnal emissions: A failure to replicate. *American Journal of Psychology*, 125, 39 – 50. doi: 10.5406/amerjpsyc.125.1.0039
- Widaman, K. F., **Helm, J. L.**, Castro-Schilo, L., Pluess, M., Stallings, M. C., Belsky, J. (2012). Distinguishing ordinal and disordinal interactions. *Psychological Methods*, 17, 615 - 622.
- Helm, J. L.**, Sbarra, D. A., Ferrer, E. (2011). Assessing cross-partner associations in physiological responses via coupled oscillator models. *Emotion*, 12, 748 – 762. doi: 10.1037/a0025036
- McAssey, M. P., **Helm, J. L.**, Hsieh, F., Sbarra, D. A., Ferrer, E. (2011). Detecting synchrony in psychophysiological signals from dyadic interactions. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 9, 41 – 53.

Substantive Publications

- Morales, S.*, Ram, N., Buss, K. A., Cole, P. M., **Helm, J. L.**, Chow, S. M. (*under review*). Age-related changes in the dynamics of fear regulation in early childhood.
- Parra, L.*, Benibgui, M., **Helm, J. L.**, Hastings, P. D. (*under review*). The buffering effect of the chosen family: Peer support, family rejection, and psychosocial adjustment in LGB emerging adults.
- DiQuattro, N. E.*, **Helm, J. L.**, Geng, J. J. (*under review*). Distractor probability changes shape of the attentional template.
- Parra, L.*, Benibgui, M., **Helm, J. L.**, Hastings, P. D. (*in press*). Minority stress predicts depression in lesbian, gay, and bisexual emerging adults via elevated diurnal cortisol. *Emerging Adulthood*.
- Belsky, J., Newman, D. A., Widaman, K. F., Rodkin, P., Pluess, M., Fraley, R. C., Berry, D., **Helm, J. L.**, Roisman, G. I. (2015). Differential susceptibility to effects of maternal sensitivity? A study of candidate plasticity genes. *Development and Psychopathology*, 27, 725 – 746.
- Tseng, W. L., Guyer, A. E., Briggs-Gowan, M. J., Axelson, D., Birmaher, B., Egger, H. L., **Helm, J. L.**, Stowe, Z., Towbin, K. A., Wakschlag, L. S., Leibenluft, E., Brotman, M. A. (2015). Behavior and emotion modulation deficits in preschoolers at risk for bipolar disorder. *Depression and Anxiety*, 32, 325 – 334.
- Han, G.*, **Helm, J. L.**, Iucha, C., Zahn-Waxler, C., Hastings, P. D., Klimes-Dougan, B. (2015). Are executive functioning deficits concurrently and predictively associated with depressive and anxiety symptoms in adolescents? *Journal of Clinical and Adolescent Psychology*. DOI: 10.1080/15374416.2015.1041592
- Helm, J. L.**, Sbarra, D. A., Ferrer, E. (2014). Coregulation of heart rate variability in adult romantic partners, *Emotion*, 14, 522 - 531.
- Hastings, P. D., **Helm, J. L.**, Mills, R. S. L., Serbin, L. A., Stack, D. M., Schwartzman, A. E. (2015). Dispositional and environmental predictors of the development of internalizing problems in childhood: Testing a multilevel model. *Journal of Abnormal Child Psychology*, 43, 831 – 845.
- DeRose, L. M., Shiyko, M., Levey, S., **Helm, J. L.**, Hastings, P. D. (2014). Early maternal depression and social skills in Adolescence: A marginal structural modeling approach. *Social Development*, 23, 753 – 769.
- Mills, R. S. L., Hastings, P. D., Serbin, L. A., Etezadi, J., Stack, D. M., Schwartzman, A. E., Li, H. H., **Helm, J. L.** (2011). Temperamental, parental and contextual contributors to early-emerging internalizing problems: A new integrative analysis approach. *Social Development*. doi: 10.1111/j.1467-9507.2011.000629.x

PRESENTATIONS

- Helm, J. L.,** Ram, N. (2015). Different Perspectives on Statistical Modeling of Physiological Covariation. Research talk presented to the American Psychological Society.
- Helm, J. L.,** Castro-Schilo, L. (2014). *Bayesian versus Frequentist Estimation of Multi-Trait Multi-Method Confirmatory Factor Models*. Research talk presented at Modern Modeling Methods Conference.
- Helm, J. L.,** Grimm, K. J. (2014). *Higher Order Taylor Polynomial Methods to Estimate Nonlinear Mixed Effects Models for Longitudinal Panel Data*. Research talk presented to the Society of Research in Child Development: Developmental Methodology.
- Helm, J. L.,** Castro-Schilo, L. (2014). *Differences in Estimation Frameworks for Multi-Trait Multi-Method Confirmatory Factor Models*. Research talk presented to the Society of Research in Child Development: Developmental Methodology.
- Helm, J. L.,** Ram, N. (2014). *Articulating Developmental Change with Simple and Complex Growth Models*. Teaching talk presented to the Society of Research in Child Development: Developmental Methodology.
- Helm, J. L.,** Hastings, P. D., Miller, J. (2014). Issues, Questions, and Tentative Answers in Studying Physiological Synchrony. Research talk presented to the Society of Research in Child Development: New Conceptualization in the Study of Parenting-At-Risk
- Hastings, P. D., **Helm, J. L.,** Mills, R. S. L, Serbin, L. A., Stack, D. M. (2012). *Adverse socialization experiences predict the development of internalizing problems in preschoolers with high temperamental inhibition or elevated salivary cortisol levels*. Research talk presented to the International Society for the Study of Behavioural Development.
- Widaman, K.F., **Helm, J. L.,** Castro-Schilo, L., Pluess, M., Stallings, M. C., Belsky, J. (2012). *Reparameterizing Regression Models to Test Interaction Hypotheses More Informatively*. Research talk presented to the Society for Research in Child Development.
- Widaman, K. F., **Helm, J. L.** (2011). *Nocturnal Emissions: A Failure to Replicate*. Research talk presented to the Society of Multivariate Experimental Psychology.
- Helm, J. L.,** Aichele, S. A. (2010). *Understanding Maximum Likelihood*. Research talk presented to the Psychology Department. University of California, Davis, CA.
- Helm, J. L.,** Ferrer, E. (2009). *Physiological Linkage in Romantic Relationships*. Research talk presented to the Psychology Department. University of California, Davis, CA.

Helm, J. L., Ferrer, E. (2009). *Physiological Correspondence of Romantic Partners in Different Interaction Tasks*. Research talk presented to the Psychology Department. University of California, Davis, CA.

Helm, J. L., Ferrer, E. (2009). *Modeling Heart Rate and Respiration via Coupled Linear Oscillator Models*. Research talk presented to the Psychology Department. University of California, Davis, CA.

TEACHING EXPERIENCE

Course Instructor (4 courses; > 210 students total)

Course Title: Research Methods in Psychology; 2016

Course Title: Statistical Analysis of Psychological Data; 2016

Course Title: Introductory Statistics for the Behavioral Sciences; 2013

Workshop Instructor (5 workshops; > 100 students total)

Workshop Title: Longitudinal Data Analysis ; 2010 - 2015

Workshop Instructor (4 workshops; > 80 students total)

Workshop Title: Data Mining ; 2011 - 2015

Workshop Instructor (4-hour lecture; > 150 students total)

Workshop Title: Growth Modeling; 2014

Graduate Course Teaching Assistant (14 courses; > 400 students total)

Course Title: Statistical Analysis of Psychological Data; 2012

Course Title: Causal Modeling of Correlational Data; 2010

Course Title: Analysis of Variance; 2011

Course Title: Statistical Analysis of Psychological Data; 2008 - 2013

SERVICE POSITIONS

Reviewer

Psychological Methods, Multivariate Behavior Research, Structural Equation Modeling, International Journal of Psychophysiology, Developmental Psychopathology, Child Development

Coordinator and Calendar Administrator

Quantitative Psychology Colloquium, UC Davis

Fall 2010 – Spring 2011

Prospective Student Visit Coordinator,

Quantitative Psychology, UC Davis

Winter 2010 - 2012