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Latent Growth Modeling in the Study of Change

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Biography: Robert Vanderberg is the Department and Roger O. Arnold Professor of Business at the University of Georgia Terry College of Business Department of Management and a Full Professor in GLOBIS Management at the University of Georgia. He received his PhD in the area of Social Psychology from the University of Georgia, graduating in 1982. His areas of expertise consist of Employee Survey Administration and Feedback, Change Management, Structural equation methodology and introductory and Advanced Statics. He has previously consulted with companies such as IBM, Georgia Pacific and Life Office Management Association. He has received various reward over his career from Best Publication Award in Research Methods for Past Decade by Research Methods Division, Academy of Management, 2009 to Superior Teaching Recognition by the Honors Day Convocation, The University of Georgia, 2011.

Abstract: The primary goals of this workshop are to provide participants with: (a) the methodological issues and guiding principles underlying the design of longitudinal research; (b) the analytical tools needed to undertake latent growth modeling (LGM); and time permitting (c) the analytical tools needed to undertake latent change or difference score analysis (LDS). With respect to (a), discussion will be on the many methodological design considerations or guiding principles a researcher should attend to when designing a longitudinal study. After this, we will start a review of LGM. Participants will be exposed first to what are referred to as Level 1 or unconditional

LGMs. From there, they will be exposed to increasingly complex Level 2 or conditional LGMs. The last LGM constitutes a relatively complex model with causal paths between latent variables, and tests of mediation. Upon completion of the LGM portion of the workshop, and time permitting, we will start the review of LDS. We start with relatively simple LDS models and build to increasingly complex models. For both the LGM and LDS portions, participants are provided handouts with all of the syntax for each of the models. Also, the databases used for the examples will be provided. The examples are all anchored with an organizational behavior or industrial-organizational psychology framework. Finally, considerable time will be spent considering the output, and teaching participants how to interpret the outcomes, particularly those relevant to the tests of hypotheses. All examples use structural equation modeling and are tested using the Mplus