Series Editor's Note

When I look at the growth of the contributions in Guilford's Methodology in the Social Sciences series, I see some spectacular contributions spanning essential areas of advanced modeling and statistical analysis procedures. This work by Kevin J. Grimm, Nilam Ram, and Ryne Estabrook is yet another staple for social science researchers to read and digest. These authors are in the group of new innovators and leaders in the field of developmental methodology; they are to this academic generation what the likes of John Nesselroade, Jack McArdle, John Horn, Bill Meredith, and Keith Widaman are to my academic generation. This book also illustrates the new age of longitudinal growth modeling techniques that mature research areas need to be able to model the complex dynamic process of change and growth. These authors play the roles of innovator and educator with equal aplomb.

This book has a number of features that you will particularly enjoy. First, it contextualizes longitudinal research by outlining the fundamental goals of longitudinal research—the raisons d'être for collecting longitudinal data in the first place! Its focus is not on the panel model for longitudinal data, but rather on the varieties of growth models that are possible. The authors begin with the basics of growth modeling but then add some "miracle grow" to the soil and bring to fruition models for nonlinear growth, growth mixture models, models for non-normal data, models with categorical indicators and outcomes, and the whole complement of change score models that have caught the fancy of many researchers.

One of the features you will find particularly useful is the extensive code that the authors present. They provide the code for each model in one of two proprietary software platforms (SAS and Mplus) and in the world of R. For those not familiar with R, put the letter R into your favorite search engine and the first page that comes up will be *http://www.r-project.org/*. As you will see, R is the free and open-source software development platform created by a thriving community of scholars who are contributing to the

development of statistical procedures and techniques. The two packages that Grimm, Ram, and Estabrook use are nlme and OpenMx; they have contributed to the development of the latter.

This book is a treasure and a very good complement and extension to my own contribution to this series, Longitudinal Structural Equation Modeling. You will find this book by Grimm, Ram, and Estabrook to be everything that you would like it to be: authoritative, accessible, and avant-garde. As with all of the books in the series, I entreat you to "enjoy!"

.one Guinord

Copyright © 2017 The Guilford Press. No part of this text may be reproduced, translated, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission from the publisher. Purchase this book now: www.guilford.com/p/grimm

Guilford Publications 370 Seventh Avenue, Suite 1200 New York, NY 10001 212-431-9800 800-365-7006 www.quilford.com

TODD D. LITTLE

Montecatini Terme, Italy