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## BOOK REVIEWS

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### Review of *Intensive Longitudinal Methods: An Introduction to Diary and Experience Sampling Research*

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*Intensive Longitudinal Methods: An Introduction to Diary and Experience Sampling Research*, by Niall Bolger and Jean-Philippe Laurenceau. New York, NY: Guilford Press, 2013. 256 pp. ISBN: 978-1462506781. \$50.00, hardcover.

*INTENSIVE LONGITUDINAL METHODS* IS THE LATEST volume in Guilford Press's "Methodology in the Social Sciences" series. The volume is co-authored by Niall Bolger and Jean-Philippe Laurenceau—two highly visible and respected social psychologists who have a solid track record for research on interpersonal relationships, intimacy, personality processes, and emotion using daily diary and experience sampling methods.

The expression "intensive longitudinal methods" is designed to cover the analysis of data from a variety of short-term longitudinal methods—methods that have been described in the literature under a number of terms, including "experience sampling," "daily diary," "momentary ecological assessment," and "ambulatory assessment." One of the common features of these methods is that they involve sampling a person's thoughts, feelings, and behaviors repeatedly across a relatively brief period of time. A growing number of researchers have adopted intensive longitudinal methods as a way to supplement the kinds of experimental tools typically used in social psychology. One of the advantages of intensive longitudinal designs is that they allow for an in-depth analysis of how various psychological processes operate within a person. This volume is designed to explain the rationale for intensive within-person designs, how to collect the relevant data, and, most importantly, how to model and analyze those data.

The volume covers a wide range of topics, starting with the basics (i.e., explaining the rationale for intensive longitudinal studies and the decisions investigators need to make about how

to sample psychological attributes across time) and gradually moving into applications, such as modeling the time course of a continuous variable and modeling within-person causal processes. According to the preface, the volume is designed to complement Mehl and Conner's *Handbook of Research Methods for Studying Daily Life* (Guilford Press). It does so perfectly, providing in-depth analyses and discussions that will help new and experienced researchers learn and understand these methods.

Overall, we found this volume to be very approachable, fast-paced, and interesting. Beyond this, there are four features of this book that really stood out for us. First, we particularly appreciated the fact that the examples were tailored to an audience of social-personality psychologists. There are many books on the market that explain multi-level regression analyses, but the majority of those books are tailored to audiences (e.g., educational psychologists) that confront different kinds of problems and challenges than the ones that social and personality psychologists might face. We think Bolger and Laurenceau's book will prove especially valuable to social-personality psychologists because the issues are framed in a way that will require little translation. Furthermore, the authors do a great job of pointing out common analytical pitfalls that social-personality psychologists are likely to encounter when analyzing their data. (Having said that, we should make it clear that there are no obstacles that would prevent researchers outside of social or personality psychology from benefiting from this volume.)

Second, not only do the authors do an excellent job of explaining how intensive longitudinal data can be modeled, they also provide step-by-step instructions on how to do so. Many of the chapters contain example data sets, along with syntax that can be used to estimate the models in a variety of statistical packages (including most prominently SAS and SPSS, but also including R and Mplus in some chapters). We found it extremely easy to "follow along" with the examples provided in the text. Researchers who are interested in learning how to use these methods will be able to follow the examples easily and adapt the syntax for their own purposes. Moreover, as an additional instructional tool, the authors provide examples of how to report results for a journal article, providing clear templates and thorough explanations of what kinds of information should be reported and how to do so.

Third, many authors of methodological books struggle to find the right balance between explaining technical matters in a way that can be understood by newcomers, but without sweeping too much of the technical details under the rug. Bolger and Laurenceau strike this balance perfectly. The volume contains valuable introductory chapters that explain the rationale behind the statistical models, the motivation for using intensive longitudinal designs, and some excellent examples. But, importantly, the volume also contains chapters on advanced topics, such as how to model categorical outcomes (Chapter 6), the design and analysis of data from studies of distinguishable dyads (Chapter 8), and how to test mediation processes in a within-persons design (Chapter 9). Indeed, it is the chapters on psychometrics (Chapter 7) and statistical power (Chapter 10) that really make this volume shine. If the authors had merely explained in a practical way the basics of modeling intensive longitudinal data, they would have made an enormous contribution to the field. They have gone beyond that considerably, however. As such, this volume will be of great interest not only for researchers who are considering collecting intensive longitudinal data for the first time, but for reviewers and researchers who are already familiar with the methods and who are seeking to round out or expand their existing knowledge.

Finally, there is a web site that accompanies the book, [www.intensivelongitudinal.com](http://www.intensivelongitudinal.com), which contains the datasets and syntax for the various examples discussed in the book in an impressive

number of formats, including Mplus, SPSS, SAS, R, and HLM. We made a point to systematically work through the examples in SPSS, R, and Mplus. With a working knowledge of these programs, the provided syntax is clear, easy to follow, and has helpful comments throughout.

Are there areas for improvement? We thought that one thing the book was missing was a systematic discussion of the pros and cons of various software options for analyzing multilevel data. The authors occasionally note that the results from one package might differ a bit from those produced by another package due to varying options available across them (e.g., methods for modeling autocorrelation). We would have liked to have read a bit more about how these differences might matter. In short, readers may be left with the relatively basic question of whether they are doing something “wrong” by not using SAS, for example. In addition, we thought that readers could benefit from learning more about what the syntax commands do in various packages. We realize it is a bit risky for a published volume to include such exposition because software can change relatively quickly. But with some additional explanation, it might be easier for researchers who are new to these methods to adapt the code in meaningful ways to slightly different applied problems. These suggestions notwithstanding, we believe this volume makes an excellent contribution to the literature and will be valuable to both younger and seasoned researchers who are interested in exploring the world of intensive longitudinal data analysis.

#### AUTHOR NOTES

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