

Book reviews

Oxford handbook of methods in positive psychology, A. D. Ong and M. H. M. van Dulmen (Eds.), Oxford University Press, New York, 2007, 672 pp., US\$79.95, hardback (ISSN 9780195172188).

Scientists need to be more aware of analytic approaches that are outside of their primary expertise and training. Convenience is not an acceptable explanatory variable for the selection of methods and data analyses. Most readers of the 42 chapters in this volume will be exposed to new analytic approached and are likely to develop previously unconsidered hypotheses in their areas of interest.

The book is structured around the different ways in which variance can be partitioned. As a novel approach to a handbook on research methods, each chapter illustrates the relevance of techniques to specific research questions on positive emotions, traits, or processes. Yet, as will be discussed, the successful execution of this objective varies from chapter to chapter. The first and second sections of the book focus on intraindividual variability and change, respectively. That is, how components of well-being are organized and structured within a particular person across different occasions. The methodologies discussed in the first two sections are likely to be less familiar to readers and thus, offer some refreshing ideas to contemplate. The third section will be more familiar to readers as it focuses on between-person and between-group (e.g., crosscultural) differences in trait and state psychological processes. There are several thought-provoking chapters in this section. For example, Schimmack (Chapter 7) and Isen and Erez (Chapter 17) carefully scrutinize dominant approaches to affect measurement. After reading their reviews, researchers will hopefully become more attuned to their rationale for selecting measures and analytic strategies. The discrete affects to be focused on, time frames utilized, participant response formats, and obtrusiveness of measures each strongly influence construct validity and the structure of affect (e.g., relations between positive and negative affect). Another chapter worthy of note is Kunzmann's and Stange's comprehensive discussion of definitions, theories, and measures of wisdom and the importance of strong theory as a necessary foundation for good methodology (Chapter 21).

The fourth and fifth sections of the book expand upon the earlier chapters by focusing on between-person and between-group differences in intraindividual variability and change, respectively. The content in these chapters describe a number of techniques that allow scientists to capture the dynamics of particular phenomena (e.g., thoughts, feelings, behaviors, and events), people, and dyadic relationships across time and context. Upon reading Chapters 23 to 42, it becomes evident that the only limitation in the types of questions that can be asked and tested is the creative sophistication of the researcher.

If you plan to collect multiple measurements of person characteristics over time (using experimental, longitudinal, or experience-sampling designs), then reading this volume can seem overwhelming. It can be daunting and even paralysing to consider the ways in which these types of datasets can be analysed. Yet, the brief overviews in this volume provide some excellent starting points for further reading and eventual mastery of complex but important scientific tools. Despite my positive endorsement of this volume, there are some issues worthy of consideration including the centrality of positive psychology and issues relating to a tool-based science.

In the last few years, there has been an explosion of work in the field of positive psychology. It was only a matter of time until someone published a book devoted to state-of-the-art research methodologies and analytic approaches for scientists conducting positive psychology research. Research topics previously designated as personality psychology (e.g., the benefits of being a more grateful or forgiving person), social or health psychology (e.g., differences between providing and receiving social support on well-being), developmental psychology (e.g., resilience in children following traumatic events), industrial/organizational psychology (e.g., differences between people who view their work as a job, career, or calling) and clinical psychology (e.g., interventions that produce high and enduring levels well-being) have recently been given an additional label: positive psychology.

Regardless of how research studies are defined or marketed, quality and utility are still the criteria for how research should be evaluated. Researchers invested in positive psychology study incredibly interesting topics but their flawed scientific techniques mar any potential contributions to knowledge (the signal to noise ratio is probably no different than other specialty areas). Thus, it seems reasonable that people conducting research in positive psychology should be using the same sophisticated methodologies and analytic approaches as other scientists. Yet, one cannot help but wonder whether it is superfluous to produce a volume on research methods for positive psychology when there are so many other handbooks of research methods (e.g., Kendall, Butcher, & Holmbeck, 1999; Reis & Judd, 2000).

The first question I asked myself when reading the title of this book was whether there are methods and analytic approaches that are specific to positive psychology. There can be little disagreement that the answer is "of course not." The title does a disservice to all of the efforts by the editors, contributors, and potential consumers of this text. It is relevant to all scientists and not just those studying topics relevant to positive psychology. This ambitious and informative volume outlines a set of tools that allow scientists to ask more complex research questions and conduct more rigorous tests of them. A book review cannot do justice to the novel ways in which the authors tackle important questions about how people's personalities and lives can be dissected in meaningful ways to better understand what affects positive experiences and traits. Some of the more authoritative and thoughtful chapters instantly inspire new approaches to old questions.

Shigehiro Oishi (Chapter 9) provides a parsimonious overview of how to use structural equation modeling and item response theory to address questions concerning cross-cultural variation in psychological experiences. Based on theoretical accounts of Asian cultures, it was hypothesized that scale items relating to pride would be less relevant to the latent construct of self-esteem for Chinese compared to American samples. Item response theory (IRT) was carefully illustrated as a way to test this hypothesis by relating to measurement equivalence between two groups. Scientists can use IRT to test whether the probability of each possible response on a scaled item differs between groups that are theoretically expected to differ on a latent construct. For example, Shelly Taylor's work suggests that women's stress response is different from men in that they are more likely to seek out responsive social contacts or care for other people. Using the methods outlined by Oishi, this can be tested by examining whether items relating to the provision and seeking of social support are more

likely to be endorsed by women compared to men on days characterized by strong stress responses.

Alex Zautra and colleagues (Chapter 34) used a "daily diary" design and multilevel modeling to comprehensively examine the relations between positive and negative experiences. Although frequencies of positive and negative life events were positively related at the between-person level, there was no association at the within-person level. Other results showed that only positive, but not negative, daily events predicted daily positive affect whereas both more positive events and less negative events both predicted less daily negative affect. These data suggest that there is some meaningful and non-trivial independence between positive and negative experiences (i.e., studying low negative affect or infrequent negative events is not synonymous with high positive affect or frequent positive events). This type of methodology can be used to better understand the nature of psychological health and what personality and situational factors increase its likelihood.

There are several other excellent chapters on how experience-sampling technologies and multilevel modeling can be used together to examine complex questions such as whether people with different personality configurations respond differently to particular daily experiences in terms of intensity, velocity, flux, and duration, (see Fleeson in Chapter 35, Brown & Ryan in Chapter 37, and Hawkley, Preacher, & Cacioppo in Chapter 39). Each of these chapters originates with strong theoretical models and testable hypotheses to showcase how these methodologies can be used to better understand the nature of well-being and how it can be obtained for briefer and longer durations of time. Other chapters in the book introduce less widely used approaches for analysing variability, change, and structural patterns of responding when people are examined repeatedly over the course of time (e.g., P-technique factor analysis, dynamic factor analysis, linear and non-linear dynamic systems). Many of these techniques are not taught in graduate level psychology courses and require non-traditional software packages. After reading through this volume, it becomes clear that there are a number of research questions that cannot be asked or addressed without knowledge and application of these advanced statistical tools.

My final point is a caveat about how this book might be used. The word "tools" is an appropriate characterization of much of the material described in this volume. One of my concerns is that people will use the exciting analytic tools presented in this book without specifying adequate research questions and theory in advance. Without an adequate context and rationale, these analytic approaches are no better or worse than traditional approaches. It is easy for

scientists, journal and grant reviewers, and research consumers to be seduced by state-of-the-art approaches. Yet, some research questions do not require sophisticated methods. Of course, this caveat can be mitigated by multi-study papers or systematic research programs wherein initial empirical explorations are used as an initial entry point into a topic with follow-up replication and extension studies. Yet, even if this strategy is employed, it is important to provide a theoretical framework for how and why sophisticated methodologies and analytic techniques provide some degree of functional utility (e.g., clinical, diagnostic, knowledge) above and beyond more traditional, less complex approaches.

Ideally, I would have liked to have seen an initial statement conveying the importance of developing sound theoretical frameworks and testable hypotheses. As with any book with multiple authors, there was some variability in the quality and utility of chapters. There were some truly outstanding chapters with compelling theoretical frameworks and research aims to justify the data analytic procedures. With the aim of avoiding a tool-based science, it would have been useful to require these strong theoretical standards for each of the chapters. After all, a few chapters provided insightful commentary about particular tools but the concrete illustrations appeared to be free-floating expeditions of existing datasets with insufficient discussion about whether and how the utility criterion was satisfied. Exploratory research without a priori hypotheses is certainly important to ensuring the continual growth of a scientific discipline. However, if the goal of this handbook is to introduce innovative techniques to stimulate high quality research, then the concrete

illustrations for each chapter should showcase how these tools often provide the most appropriate tests of theoretical models (when more traditional approaches fail). These criticisms do not detract from my belief that this volume is a valuable overview to a broad array of methods and analytic approaches. My hope is that the seduction of state-of-the-art methods is matched by an equal investment in using sound theory and hypotheses to guide the selection of methods. Alternatively, research using these stateof-the-art methods should be part of multi-study research programs with initial empirical explorations coupled with replication and validation studies (see Kerr, 1998, for an in-depth discussion of this issue).

It would be a mistake for people to pass up this volume because they do not identify with positive psychology. Taken together, the chapters in this volume are an impressive, thought-provoking reference for scientists interested in optimizing the quality of their work.

References

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