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Cognitive Limitations in Aging and Psychopathology. Edited by R. W. Engle, G. Sedek, U. von Hecker and D. N. McIntosh. (Pp. 452; \$85.00; ISBN 0521834074 hb.) Cambridge University Press: New York. 2005.

This volume represents an admirable attempt to synthesize a broad range of work from a variety of researchers in different fields examining cognitive processing in young healthy volunteers, as part of the normal aging process and in psychiatric disorders. The chapters are generally well written, and some have a strong methodological focus: in the first chapter the editors summarize many of the experimental paradigms used in cognitive psychology in a well-written and informative overview; in the third chapter, Oberauer offers a commendably clear introduction to some of the statistical techniques that can help tease apart specific and general deficits in studies of aging in a manner comprehensible to the non-specialist; Sliwinski and colleagues provide a strong critique of the use of betweensubjects methodology when attempting to infer information about intra-subject variability, and set out the advantages of within-subjects designs in the fourth chapter. These initial expert summaries are very useful, since they can be used as reference points when reading the subsequent chapters.

The book is split into three sections, 'Working memory and cognitive functions', 'Aging and psychopathology of cognitive control' and 'Attention, inhibition, and reasoning processes'. At times these divisions seem a little arbitrary, since much of the research in each section relates closely to work described in the other sections. Unfortunately, the links between different bodies of work are rarely made explicit for the reader. Although the authors do occasionally cross-reference other chapters, the book as a whole does not have a particularly strong focus and one is occasionally left feeling as though each of these chapters could just as easily have been published as a separate review paper.

In general, each author focuses on presenting and interpreting their own data, but rarely connects their findings to those of other authors, although there are exceptions, mainly in the chapters where one of the editors is a co-author. Of course, such compartmentalization within the book also reflects the compartmentalization within the cognitive sciences, as the editors highlight in the first chapter. As a result, there is disappointingly little debate between authors, even those working in similar fields. While they often present their own models and data concerning the causes of cognitive impairment in aging or psychopathology, few challenge the ideas of any of the other authors, suggest reasons why their own model might represent an improvement on others, or suggest experiments that could decide between two models. For example, chapters 9 and 11, by Joorman and McIntosh and colleagues respectively, both discuss how cognitive deficits in depression might be causally related to ruminations, although using different models. Even though both chapters seek to understand the same phenomena from a strikingly similar perspective, the authors do not even refer to each other's work, let alone engage in debate!

Despite the lack of integration between the chapters, the majority of readers will undoubtedly find valuable, novel and interesting information and ideas in this volume, particularly since those who specialize in one of the areas covered in the book (e.g. aging) are likely to be less familiar with research techniques used in the other (e.g. psychopathology). As is to be expected from the title, the vast majority of the findings presented are from the realm of cognitive psychology. Only a minority of the authors draw on data from neurophysiological techniques such as functional magnetic resonance imaging (fMRI) or electroencephalography (EEG). This is a surprising shortcoming, since such techniques are increasingly being brought to bear on many of the questions posed by aging and psychopathology. Notable exceptions include the contributions of West and Bowry, who discuss EEG data in relation to cognitive deficits in aging, and of Barch and Braver, who present fMRI data linking dorsolateral prefrontal cortex dysfunction to cognitive impairment in schizophrenia. Another surprising absence is the lack of any data or discussion Book reviews 299

relating to cognitive impairment in bipolar disorder.

In summary, the editors of Cognitive Limitations in Aging and Psychopathology have assembled a strong cast of researchers to discuss the nature and causes of cognitive impairment in psychiatric disease and normal aging. On the whole, the writing is clear and informative, and this book should prove useful to any psychologist interested in aging or psychopathology. However, the lack of overt integration between the contributions is a significant limitation that will discourage readers from using the interdisciplinary approach encouraged by the editors, instead making it more likely that each chapter will be considered solely on its own merits.

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