

Novel Approaches to the Diagnosis and Treatment of Post-traumatic Stress Disorder. Edited by Michael J. Roy; IOS Press; Washington, D.C., Amsterdam, Netherlands; 2006; ISBN 1-58603-5908; \$126 (hardcover); 321 pp.

Because of the neverending spectacle of war, natural disasters, and terrorism, posttraumatic stress disorder (PTSD) remains an ongoing and, unfortunately, difficult-to-treat common mental disorder. This book presents the proceedings of a PTSD research workshop held on the Adriatic coast of Croatia in June 2005. That picturesque setting has unfortunately been the site of war in the 1990s, and this book is an attempt to bring together researchers from around the world to better understand how to treat this disabling condition. Although the book title suggests nonconventional treatments or methods of diagnosis and treatment, the only novel topic discussed in any depth is the emerging field of virtual reality (VR) treatment of PTSD. The book covers this nascent field well, and aspects of virtual reality treatment occupy approximately half of the book. The reader interested in virtual reality treatment of PTSD should be the target audience for this text.

Most of the authors are from the United States or Croatia, though there are contingents from Spain, the Netherlands, England, France, Israel, and the Republic of Georgia. The multinational collection of authors is primarily focused on the evaluation and treatment of combat related PTSD. The authors have obviously worked with recent American, European, and Middle Eastern war veterans. The editor of the book is not a psychiatrist, but an internal medicine professor and director of the division of military internal medicine at the Uniformed Services University of the Health Sciences.

The book is, in effect, a hardbound journal with 28 articles on various aspects of PTSD. Because the book incorporates many investigators research interests, it is a bit of potluck, though the papers do intertwine. Each article begins with an abstract and concludes with references; articles are generally about ten pages. Each paper is independent of the others; the book can therefore be read as one reads a journal, each chapter as it piques one's interest and in short sessions, though I read it in a few days. The articles are grouped into six sections: I Epidemiology and pathophysiology; II Diagnosis and Screening; III Management; IV Virtual Reality Therapy; V Other Aspects of Military Healthcare; VI Working Groups.

The first half of the book provides a good overview regarding what is known about the pathophysiology of PTSD. These papers cover fundamental issues of anatomy and physiological measures pertinent to PTSD, though some papers are less germane to clinical practice than others. In general, the papers are sometimes overlapping, and the introductory sections, which each define PTSD and give an overview of the condition, grow tiresome. The introductions could have been much more focused on the content of the paper. After the start of the book, the definition of PTSD could have been omitted in subsequent papers. That is, there is no reason for every paper to define PTSD at the start of the paper, though by the end of the book,

the reader does find novel ways to describe the same phenomenon.

The section on management of PTSD focuses primarily on pharmacological management. This chapter briefly summarizes the randomized placebo-controlled trials for PTSD and highlights the relatively small effect sizes found in these studies. Although the book is mostly focused on military issues, the chapter does not focus on treatment of combat-related PTSD. The other two papers in this section are of military interest, primarily; they describe Canadian military approaches to combat stress and a NATO group's effort to identify psychological casualties of combat.

This book is pertinent because it focuses on an emerging treatment method for PTSD, virtual reality behavioral therapy. In VR treatment, the patient with PTSD is gradually exposed through computer graphics in a headset to moving images associated with the individual's traumatic experience. The theory behind the therapeutic benefit of virtual reality therapy is that patients exposed to three-dimensional images representing their trauma will be able to confront and habituate to the feared object over time. The VR sections are longer on descriptions of virtual reality treatment and technology than on the results of treatment studies. In fact, there is little controlled data about the benefits of VR in combat-related PTSD, though studies are underway. Unfortunately, the converging paths of sophisticated computer graphics and many returning soldiers traumatized in recent wars will put the theoretical benefits of VR to useful testing.

The book portends potential high-technology treatments for PTSD and stimulates those interested to test the potential in patients with combat-related PTSD, many of whom have not fared well with existing treatments. The chapters are generally well written, though several of the papers could have been excluded, and the book may have been better if it only focused on virtual reality treatment of PTSD. For the general clinician treating PTSD, the expense of the book would not justify the purchase. For military, VA, and other civilian physicians involved in VR clinical research or practice, the book may serve as a useful starting point and access to authors already involved in this promising treatment.

Lawrence A. Labbate, M.D.
University of Arkansas for Medical Sciences
VA Medical Center
Little Rock Arkansas

Biology of Personality and Individual Differences. Edited by Turhan Canli, The Guilford Press, New York, New York; 2006; ISBN: 1-59385-252-5, \$65 (hardcover); 479 pp.

Dr. Canli produced this book based on the people assembled and papers presented for a conference on the topic of neurobiological correlates of personality and temperament at Stony Brook University in August of 2004. Besides Dr. Canli, 36 other researchers in brain imaging, genetics, clinical psychology and

psychiatry, and other neurosciences make up the list of contributors. Over the years, there have been multiple advances in both the theory and the science of brain function, but the results have been scattered and not fully synthesized into a coherent picture of just how brain function maps onto brain activity. The intent of this volume is to bring that cross-sectional work together into an overview.

The book is divided into seven sections, an introduction to set the stage, and then segments on history, studies on personality traits such as extraversion, age and sex differences, genetic and neural correlates of anxiety, childhood development, and finally animal models of personality. In point of fact, there is some cross-mixing of these elements throughout the book, but the distinctions remain valid and helpful.

The book begins with a chapter devoted to the theoretical and experimental work of Jeffrey Gray, who, along with other colleagues, laid out the basic framework for this field in many ways starting in the 1970s and continuing until his death in May 2004, a few months prior to the conference. Each chapter then stands alone as a description of facets of the work on some trait, drive, or approach from stimulation and arousal to more complex permutations of individuality. Nearly every aspect is given some part to play in the depiction of how it all comes

together—hormones, genetics, experience, neurotransmitters—whatever portion of the entire story has been the basis for work in the field is represented in one or more chapters.

Most chapters are laid out somewhat similarly, which helps greatly when there are this many individual authors. There are introductory statements, followed by basic studies in the area, correlations from animals to people, some sort of summary and future directions statement, and finally a lengthy list of references. There is no final summarizing chapter as such, but the book does have an extensive subject index.

Some of the chapters are easier to read than others, but basically this is a book that requires some knowledge of the research into brain and behavior for maximum understanding of the content. Medical students and pure clinicians may find it too ephemeral. However, the sheer ingenuity involved in the authors' attempts to layer behavior onto neural circuitry will be fascinating to some. People involved in related research, graduate students, and neurosciences faculty should find the book very helpful.

Alan D. Schmetzer, M.D.
Professor of Psychiatry
Indiana University School of Medicine