and hypnotic medication on test performance. For those readers who desire a crash course in sleep disorders, aided by rich graphic and Internet support, the *Atlas of Clinical Sleep Medicine* is just what the doctor (PhD) ordered. The *Atlas* is edited by Meir Kryger M.D., best known for his encyclopedic *Principles and Practice of Sleep Medicine*, now in its third edition. The 40 contributors are easily recognizable as prominent sleep researchers, including psychologists such as Thomas Roth and Hans Van Dongen.

Several chapters are particularly pertinent to our field. Biology of Sleep (Chapter 3) succinctly covers topics such as the brain's arousal and neurotransmitter systems, sleep drive, circadian timing, and control of REM sleep. The subchapter on brain blood-flow is supported by stunning graphics and charts. Normal Sleep (Chapter 4) provides the normative basis for distinguishing healthy from poor and abnormal sleep from the standpoint of ontogeny. In the context of a persistent post-concussion claim, symptoms of increased difficulty falling asleep and increased awakenings is not so deviant in somebody 70, but is reason for concern in a child of 12. Pharmacology (Chapter 5) provides useful tables summarizing important drug facts, such as the hypnotic medications most known for daytime ("hangover") effects. This would help the neuropsychologist who suspects a role for drugs in that mildly deviant Trailmaking B score. Neurological Disease (Chapter 10) summarizes the sleep issues associated with many disorders. Conditions covered include narcolepsy, restless legs and periodic limb movements, epilepsy, Alzheimer's disease, Parkinson's disease, and Huntington's disease. More controversially, the chapter examines sleep in fibromyalgia and treats it as a valid diagnosis. But the sleep correlates of the syndrome have not been replicated, and the diagnosis itself was abandoned by its physician discoverer.

Several chapters are especially helpful to neuropsychologists who specialize in psychiatric and forensic referrals. Dreaming (Chapter 6) is brief, but the reader learns much about dream pathology, the psychological and neuropathological conditions that cause it, and the clinical features to look for. For example, dream impoverishment can be associated with alexithymia and various brain syndromes. In contrast, excessive dreaming is an indicator of drug withdrawal. Sleep and Psychiatric Disease (Chapter 16) is especially useful for advice on using sleep patterns to aid in the differential diagnosis of disorders from the depressive spectrum. A good rule of thumb is that hypersomnia is more predictive of bipolar depression, while insomnia indicates unipolar. Presentation and Diagnosis (Chapter 7) should prove very useful to full-time clinicians. Included are screening questions for insomnia and hypersomnia, symptom checklists, and self-report inventories (such as the Epworth Sleepiness Scale and Berlin Apnea Questionnaire). The Insomnia chapter (Chapter 9) is especially useful to readers who incorporate psychotherapy into their practice. It offers a complete guide to diagnosis, and advice on combining pharmacotherapy with cognitive-behavioral therapy.

Sleep apnea syndrome is to sleep disorder centers as mild head injury is to forensic neuropsychology: It dominates referral patterns and provides a reason for existence. Sleep Breathing Disorders (Chapter 11) is the longest chapter, and the focus is on polysomnographic interpretation. There are many pages of sleep epochs (a 30-s sleep sample) showing subtle and not-so-subtle abnormalities in respiratory effort and airflow, and many photos of noses, chins, and throats. This chapter is only for specialists wishing to seriously pursue a sideline in sleep disorders, but be forewarned: sleep medicine certification has been closed to neuropsychologists since 2005, when the American Board of Medical Specialties took over the formerly freestanding American Board of Sleep Medicine, a body originally founded with the help of experimental psychologists. This reviewer was "grandfathered in."

The *Atlas* has a unique teaching feature that is cutting edge: Online searchable text and 68 patient videos. The inside front cover contains a scratch-off activation code, that when entered at www.expertconsult.com, allows the reader to access galleries of videotaped interviews and sleep studies. The most interesting videos include an MS patient with sleep apnea and hypnagogic hallucination, and another patient with Parkinson's disease who demonstrates rapid eye movement (REM) behavior disorder. Other videos show plain vanilla snoring and obstructive apnea. I wish this educational technology had been available when I took the sleep boards in the middle 1990s.

The *Atlas of Sleep Medicine* is the perfect reference book for the neuropsychologist who needs a crash course, or a quick reference guide, when coping with the sleep laboratory report appended to a referral sheet. One chapter contains a guide to digesting the standard score summary sheet. There is little neuropsychology in this book, except for some data tables and graphs showing vigilance test scores plotted against various sleep parameters. But the gains in fundamental knowledge and professional vocabulary when dealing with medical colleagues are worthwhile.

Unique Application of Neuropsychology to Active Duty Service Members and Veterans

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The neuropsychology field has enjoyed an explosion of literature in the past 20 years. Not only have journals focusing on cognitive assessment and neurocognitive functioning gained a strong foothold in the publishing world, but we have also been fortunate to see an influx of books. Our field has books focusing on the clinical practice of neuropsychology, the presentation of specific conditions, utility of neuropsychology in forensic settings, ethics in neuropsychology, and detailed discussions of very specific conditions (e.g., brain injury), just to name a few of the general areas of publication. With such a rich publication record, it is even that much more refreshing to see *Military Neuropsychology* arrive on the scene. Edited by two neuropsychologists with current and prior military service, this volume explicitly centers its attention on the special neuropsychology needs of the active duty military and veterans. Drs. Kennedy and Moore also effectively compiled an excellent mix of civilian neuropsychologists, military psychologists, and other clinicians intimately familiar with the distinctive needs of military men and women. In fact, many of the chapter authors not only have expertise in a particular area, but they have expanded their arena by applying their existing knowledge to the specialized field of military service members and veterans.

At the risk of sharing too much of the unique information contained in this excellent volume, I nonetheless wish to point out how each and every chapter of *Military Neuropsychology* offers an appropriately different perspective than that seen in general neuropsychology books.

In light of concern raised regarding blast concussion and blunt force traumas relating to military service in Iraq and Afghanistan, three specific chapters provide important information. Not only is blast concussion defined (Chapter 5), but the expected recovery to baseline for those injuries as well as mild traumatic brain injury is clearly presented. Guidelines for expected recovery based on initial symptoms are presented, emphasizing the importance of integrating evaluations of cognition, emotion, and effort. Chapter 6 presents information regarding standardized methods for evaluating acute symptoms following a concussion, as well as the common concurrent symptoms of sleep disruption, poor effort, emotional hyper-reactivity, and worsening of some symptoms with physical exertion. Interventions following an event to achieve a return to the battle field (Chapter 6) or to return to maximal medical improvement (Chapter 7) are presented. The levels and types of care needed for military members following more severe brain injuries are also explained in these chapters.

Typically, neuropsychologists are asked to evaluate an individual to reach general conclusions regarding status from a diagnostic and treatment perspective. Chapter 3 offers a slightly different perspective by discussing how neuropsychology is used to determine one's Fitness for Duty. Rather than determining if a condition is present, a Fitness for Duty evaluation asks if an individual is capable of performing the essential functions of his or her job. The manner in which the various levels of military oversight address the Fitness for Duty question based on that particular level's interest allows for the reader to better understand how neuropsychological data are used in a non-medical setting. As might be expected, such a situation might call for individuals performing suboptimally on neuropsychological tasks. The possibility of intentionally not performing at one's optimal potential has significant legal consequences in the military setting and can lead to formal proceedings. Objective evaluation of non-credible test performance relative to the military setting is presented in detail (Chapter 4), as is the possibility that an individual might attempt to deny cognitive difficulties (i.e., fake good).

Along similar lines as that seen in Fitness for Duty examinations, the potential deleterious effects of attention deficit disorder (ADD) on one's ability to perform effectively is addressed in Chapter 8. Traditional studies of ADD and learning disabilities focused on the need for accommodations to achieve optimal benefit from a situation. In contrast, within the military community, the needs of the organization supersede those of the individual, which is why evaluations for LD and ADD answer the question if an individual is suitable for military service. Similarly, acquired medical conditions, such as being HIV+ (Chapter 9), do not portend an automatic dismissal from military service. Instead, such conditions may result in cognitive compromise which would impair a service member's ability to effectively perform required duties.

In terms of ethical issues, Bush and Cuesta (Chapter 2) address some of the rarely discussed issues pertaining to confidentiality (as the mission is the patient, not the examinee), priority of ethical code (military rather than American Psychological Association), priority of legal code (military rather than civilian law), and retention of records (neuropsychology data belong to the military not the individual), just to name a few. Common in the themes addressed in this chapter is the issue that a neuropsychologist needs to be aware to whom an evaluation is being written and under which ethical code one reports.

Unique to few situations outside the military experience is the concept of the prisoner of war (POW) who is subsequently repatriated. Moore (Chapter 10) initially offers a fascinating study of former POWs from a simple perspective of tallying. Over 97% of all former United States POWs are from the Korean War or World War II. Consequently, clinicians are advised to recognize that, not only might psychological issues might be present, but so will many medical conditions seen in individuals who are in their middle 70s or older. In addition, the medical consequences of malnutrition and torture during internment on the potential for stroke and severe mental health conditions are outlined.

Neuropsychological functioning can be compromised by several different factors, some of which might be treatable. Within the military community, issues relating to sleep deprivation (Chapter 11) and psychiatric conditions (Chapter 12) must be taken into account. The deleterious effects of sleep loss in active duty service members are clearly discussed through the use of fascinating case reports in which safety was compromised and military decisions were undermined because of sleep loss. While posttraumatic stress disorder (PTSD) is well-discussed in other texts, Kennedy and

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Moore's book offers specific information regarding the cognitive sequelae seen in patients with PTSD. Unique to the combat experience is the constant need to make decisions in extreme and hostile environments (Chapter 13). The resulting operational demand-related cognitive decline is presented as a condition, as is information regarding the prediction of individuals who are more prone to this condition and treatments which might minimize its effect.

The timeliness of *Military Neuropsychology* cannot be overstated given the current climate in which our country is seeing a rise in returning service members from Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) as well as a concurrent increase in hiring of psychologists through the Department of Defense and the Department of Veterans Affairs. The content of this volume covers many areas familiar to most practicing neuropsychologists, but does so by addressing the specific needs as applied to the military. The text truly transcends being "yet another book" by offering several chapters that are rarely discussed outside the military setting.

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