Clinical Neuropsychology: A Pocket Handbook for Assessment

Major Changes in the 4th Edition

The rapid pace of change in the field of clinical neuropsychology requires constant review and study. It is in that service that we offer this fully updated fourth edition of the *Clinical Neuropsychology* pocket handbook. To enhance the utility of the handbook as a reference for the busy clinician or trainee, this edition includes a new, thematically-integrated format, a new Clinical Takeaways section summarizing salient content at the end of each chapter, an updated online resource with a wealth of supporting and additional material, and—as detailed in the sections below—several overarching updates, including:

- A modern implementation of traditional neurobehavioral examination methods.
- An up-to-date review of contemporary issues (e.g., neuro-COVID and autoimmune encephalitides).
- Expanded areas of content, including thoroughly updated information about disorders and their assessment.
- New areas of coverage (e.g., teleneuropsychology in several chapters; anxiety and posttraumatic stress disorder and intellectual disabilities).

Part I

Part I, Foundations of Assessment, has been redesigned to include broad coverage of the foundational components of neuropsychological assessment. Themes of assessment validity and utility are woven throughout, and set the stage for a deep dive into the domain-specific cognitive functions and disorders that are explored in later sections of the handbook. Content evolves from a macrolevel overview of the utility, value, and future of neuropsychological assessment to foundational topics and complementary sources of information that can be used to enhance assessment validity and inform differential diagnosis. In addition to this broad reorganization, the following new and updated content is provided:

- A new opening chapter on the contemporary role and value of neuropsychology, with strategies to position neuropsychology to thrive in the future in the context of evolving clinical, social, and technological landscapes.
- Chapters 2 through 5 provide an integrated approach to constructing a valid, valued, and informative assessment that can be flexibly adjusted to suit a wide variety of patient characteristics, including a new and thoughtful consideration of cultural factors in assessment that is referenced throughout several chapters in the handbook, and major updates on issues related to performance validity.
- Chapters 6 through 8 summarize complementary diagnostic tools and medical considerations that support enhanced diagnostic precision and treatment planning, and clinical strategies to integrate adjunctive information such as laboratory and imaging, including new content on electrophysiologic tests.

Part II

Part II, Neuropsychological Syndromes, has been reorganized to focus on domains of cognitive functioning and patterns of neuropsychological dysfunction. These chapters are intended to clarify the phenomenological aspects of neurocognitive disorders. These syndromes represent the ways in which pathology influences brain networks and manifests in various symptoms. The

chapters in this section focus the reader on symptoms and clusters of problems that provide an enhanced understanding of the way in which brain systems are organized. Up-to-date content includes:

- A reorganized focus on the disorders of attention and the networks that underlie them.
- Current conceptualization of classic disorders of memory.
- A modernized framework for aphasiology, integrating classical lesion-based models of language disorders with functional MRI and intraoperative mapping-based approaches to understanding language systems.
- A clinically oriented approach to subdividing the complexity of interconnected frontal/subcortical networks that are critical for executive functions.

Part III

Part III has been redesigned to provide a specialized focus on neurological disorders, building on the general neuropsychological patterns and syndromes described in Part II, and integrating the foundational aspects of assessment validity and utility in Part I. An understanding of neurological disorders and their management sets the stage for differential diagnosis and/or identification of comorbid neuropsychiatric and neurobehavioral syndromes, which are the focus of Part IV. Highlights include:

- Redesigned content to increase the neuropsychologist's ability to conduct informative clinical interviews and select and interpret tests; to identify and classify the cognitive impact of disease and understand related neuroanatomical mechanisms; and to provide tailored and effective management techniques to patients, families, and referring providers.
- Updates on disease states with high rates of prevalence and disability that are frequently encountered by neuropsychologists in adult clinical practice.
- Coverage of the diagnosis and management of a range of clinical issues across the care continuum, including updates on acute conditions such as traumatic brain injury, chronic conditions such as dementia, and sequelae of infectious diseases (including a new focus on post-COVID-19).
- Strategies to conceptualize neuropsychological findings within the context of medical and neurological care.

Part IV

Part IV, focusing on neuropsychiatric and neurobehavioral syndromes, has been reorganized to consolidate those disorders that are truly "neuro-psychological." Content includes strategies to conceptualize and evaluate the psychological framework of behavioral diagnoses, and examples of how the brain and brain disorders manifest in behavioral change and within the complex interplay of emotion and cognition. Updated information includes:

- Integration of new content on intellectual disabilities within a chapter that includes a comprehensively revived approach to neurodevelopmental disorders of cognition.
- Updated discussion of the current state of the literature on the prevalence and impact of alcohol and drugs of abuse on cognition.
- New content addressing the impact of anxiety and PTSD on cognition and its interplay with neurologic disorders.
- Current state of the literature and clinical approaches to the most complex and common of neuropsychiatric syndromes.