

Preface

The diagnosis of posttraumatic stress disorder (PTSD) first appeared as a formal diagnostic category in 1980, largely as a consequence of the Vietnam War and the large numbers of military veterans who sought assistance for stress-related symptoms. However, as described in Chapter 1, exposure to psychologically traumatic events has been part and parcel of the human experience since long before the Vietnam War and extends beyond combat experiences to such events as natural disasters, sexual assault, physical assault, life-threatening accidents, childhood neglect and abuse, domestic violence, politically motivated mass violence, and terrorist acts. Research conducted mainly in the last 20 years has highlighted the vast breadth of negative consequences that may arise and endure in response to traumatic stress exposure. It has become increasingly apparent that, in addition to emotional and behavioral symptoms, PTSD is associated with significant abnormalities in neurobiological systems and cognitive processes. As detailed in this volume, such abnormalities may have profound psychosocial consequences and direct implications for treatment.

To our knowledge, this is the first volume to provide a comprehensive examination of the neuropsychology of PTSD. We attempt to provide an integrative and balanced summary of neuropsychological research relevant to PTSD, drawing from a number of related research areas. Recent advances in functional neuroimaging have led to increased integration of biological, cognitive, and clinical approaches across neuropsychiatric disorders. Reflecting the importance of synthesizing these approaches, we adopted a broad view of neuropsychology to include relevant findings from animal research and biological challenge paradigms, electrophysiological methods, functional activation studies, experimental studies of cognition and information processing, and descriptive neuropsychological methods. This approach is reflected not only in the selection of chapter topics, but

also within each chapter, leading to innovative presentations of each of these literatures.

In the past several decades researchers have gained a greater understanding of the neuropsychology of emotional disorders. PTSD presents a unique opportunity to contribute further understanding of the neuropsychological correlates of psychopathology. Specifically, PTSD differs from other neuropsychiatric disorders in that it is the only chronic mental disorder in which the experience of an environmentally induced event (i.e., the trauma) is critical to its diagnosis and development. That the development of PTSD is not genetically or biologically inevitable allows examination of the biological consequences of a psychological phenomenon.

The study of neuropsychological functioning in PTSD is an emerging area in which many questions remain. For example, does neuropsychological dysfunction represent vulnerability to, or a consequence of, PTSD? Is neuropsychological dysfunction directly attributable to PTSD, or is it better explained by iatrogenic effects or comorbidities? Are certain trauma populations or PTSD subgroups more likely to be characterized by neuropsychological impairment? How might neuropsychological features of the disorder impact assessment and treatment? Throughout the volume, chapter contributors attempt to delineate such questions and describe the degree to which these questions are addressed in the current literature.

The nature of neuropsychological impairment in PTSD has been an area of controversy, largely because of methodological challenges associated with the clinical features of the disorder. In Part I, we attempt to provide an epidemiological and methodological context in which to view the empirical literatures presented later in the volume. Part II provides a biological context with presentation of relevant findings from the animal and human neurobiological, neuroimaging, and electrophysiological literatures. Each of these chapters weaves in implications relevant to clinical neuropsychological impairments. Part III delves into cognitive and information-processing abnormalities such as biases in the way that individuals with PTSD attend to and remember emotionally relevant information and how they encode and later retrieve trauma memories. In keeping with the integrative theme of the volume, these chapters interpret such cognitive processing abnormalities within a cognitive neuroscience framework. Part IV addresses key trauma populations (children, adults, aging survivors, and victims of closed head injury) that may be expected to be associated with unique factors influencing the neuropsychological outcomes of trauma exposure, each incorporating discussion of the neurobiological context. Finally, Part V addresses clinical applications. The first of these chapters addresses clinical neuropsychological assessments in which PTSD is a central consideration. The remaining two chapters apply a neuropsychological framework to treatment issues, including psychological intervention and

pharmacological approaches. This innovative approach infuses a unique perspective that we hope will spark new ways of considering the clinical management of PTSD.

We anticipate that this book will appeal to a diverse audience and provide relevant information to researchers, clinicians, and educators with backgrounds in PTSD assessment and treatment, clinical neuropsychology, or biological psychiatry. We hope that it will generate new research and clinical approaches to understanding, assessing, and treating the potentially chronic and debilitating consequences of exposure to psychological trauma.