

Book Reviews

Stress, the Brain and Depression. By Herman M. van Praag, Ron de Kloet and Jim van Os; Cambridge University Press, Cambridge, United Kingdom; 2004; ISBN 0 521 62147 X; \$110 (hardcover); 283 pp.

The relationship between stress and depression has been postulated and assumed for ages, but the causality of stress in the etiology of depression has not been clearly, unequivocally and scientifically established. The authors of *Stress, the Brain and Depression*, Drs. Van Praag, de Kloet and van Os, emphasize that answering the question whether stress causes depression is a very important one, because “an affirmative answer would elevate stress management to a prime intervention in the treatment and prevention of depression” (Preface, p. xi). However, as they also point out, establishing a causal rather than associative connection is difficult and problematic in this case. They summarize the available literature on stress and depression and attempt to answer the question whether stress can really cause depression. The authors focus on three main issues: the pathophysiological role of stress in depression; whether there are any subtypes of depression which are particularly stress-inducible; and how best to study, diagnose, and treat depression in relation to its biological underpinnings.

The book is divided into Preface, nine chapters, and Epilogue. All chapters are systematically and richly subdivided into well-organized sub-sections, and conclude with clear, comprehensive, yet brief summaries. The Preface is a brief and sweet summary of the entire book, its goals and conclusions.

Chapter 1, “Diagnosing depression,” reflects the authors’ (and probably many others’) dissatisfaction with the present diagnostic system in general and the diagnosis of depression in particular. Three approaches to diagnosis—the nosological or categorical, the syndromal, and the dimensional/functional—are reviewed. All of them have their problems, e.g., comorbidities and sub-threshold entities in case of the nosological approach. The author (van Praag) suggests that, “psychiatric diagnosing is locked up in a nosological straightjacket, and thus immobilized. Syndromal precision is a thing of the past. Symptom analysis remains in abeyance. Functionalization of psychiatric diagnosis as we have advocated for many years is not an idea that has so far sufficiently caught on and has not received large scale investigational attention. The shortcomings of the nosological approach are disregarded, and diagnostic business continues to be carried out as usual” (p. 8). The text suggests that these approaches should not be mutually

exclusive but rather complementary and combined into a multi-tier comprehensive diagnostic system. This is certainly an interesting and thought-provoking chapter. Some may feel that it reflects too much of Dr. van Praag’s own ideas. The following chapter, “Traumatic life events: general issues” discusses areas such as stress syndrome; life events and psychiatric classification (especially in the changing views of stress within the frame of psychiatric classification through the DSM editions); life events and abnormal mental states; life events and personality structure; and genetic and environmental variables influencing exposure to life events. Interestingly, life events do not occur capriciously, the risk of being exposed to life events is influenced by genetic factors. Some life events seem to be repetitive in certain individuals. However, the answer about the pathogenic effects of stress in mental disorders is not definitive yet. Chapter 3, “Life events and depression: preliminary issues” focuses on problems such as distress versus depression; meaning of the term life event; how to assess life events (e.g., structured interviews); and what is meant by the term causation. The author (Dr. van Praag) points out that the border between sadness/distress and depression is blurred and has not been studied systematically. The chapter ends with the summary of methodological problems that make it difficult to deduce definite conclusions about the depressogenic effect of life events (p. 34). Chapter 4, “Life events and depression: is there a causal connection?” comes back to the main issue—whether life events have any causal connection to depression. The author (van Praag) first discusses the complex relationship between acute and chronic stress and depression. Many patients suffering from major depression report negative life events prior to depression. However, chronic stress is a more powerful predictor of depression than acute stress. In addition, certain people are more stress-vulnerable, e.g., those with dependent personality or ambitious personality with obsessive traits. According to the congruence hypothesis, it seems that life events could be particularly depressogenic if they wound personality traits. Thus, personality make-up seems to be a key factor in the occurrence of depression after a traumatic event! In addition, he author focuses on early adversity and depression and the role of genes in depression.

The following four chapters move more into the area of biology of depression and stress, and attempt to translate some of the previous chapters’ issues into biology. Chapter 5, “Genetics of depression,” summarizes the current knowledge on the genetics of depression, discussing genetic epidemiology

of depression; molecular genetics of depression; genes and environment; the depression exophenotype and endophenotype; and development and genes. The author (Dr. van Os) concludes that, "family, twin and to a lesser extent adoption studies all point towards a genetic influence on depressive disorder. However, this influence appears to be rather moderate and to date no replicable molecular genetic findings have been produced" (p. 72). The following chapter, "Gene-environment correlation and interaction in depression," expands on the gene-environment interaction and correlation. Chapter 7, "Monoamines and depression," provides an extensive and exhaustive summary of the role of monoamines/monoaminergic systems—serotonergic, noradrenergic, and dopaminergic ones—in depression. The chapter closes with the discussion of the behavioral correlates of the monoaminergic disturbances in depression. The monoaminergic disturbances seem to be functionally specific (e.g., heightened anxiety or disturbed aggression regulation) rather than nosologically or syndromally specific. Chapter 8, "Stress hormones and depression," is an interesting discussion on the role of stress hormones (e.g., cortisol, CRH, ACTH) in depression. The authors suggest that "depression (at least some types of depression) is characterized by glucocorticoid feedback resistance and enhanced CRH/vasopressin drive" (p. 161). They also feel that hyperactivity of the CRH-ACTH-cortisol system in depression is more than just an epiphenomenon, and might be involved in the pathophysiology of (certain types of) depression" (p. 163). Another interesting issue discussed is the fact that stress and glucocorticoids suppress neurogenesis. The chapter also focuses on the role of early adversity again, the interaction of the HPA axis and various monoaminergic systems, and concludes with the statement that, "stress indeed may be a causative factor in depression" (p. 201). The final chapter, "Stress, the brain and depression," attempts to synthesize the discussion of the previous chapters. It discusses issues such as depression, anxiety and aggression; comorbidity of anxiety and depression; anxiety and aggression as pacemakers of depression; the diagnostic implications of anxiety/aggression-driven depression; and the consequences of diagnostic renewal for biological psychiatric and psychopharmacological research. The author (van Praag) suggests that biological psychiatry's main target should be the psychic dysfunction rather than the present-day disease categories (p. 249). He also suggests functionalization and verticalization (i.e., prioritizing psychopathological symptoms/psychic dysfunctions that together constitute a mental disorder) of psychiatric diagnosis as opposed to the current horizontal manner of psychiatric diagnosis. He believes that functionalization will ultimately lead to psychiatric physiology and possibly functional psychopharmacology. An interesting treatment strategy is presented—"a combination of drugs (a selective, full, postsynaptic 5-HT_{1A} agonist, in combination with a cortisol or CRH antagonist) and psychological intervention aimed at augmenting ego strength are considered to be the treatment of choice in anxiety/aggression-driven depression" (p. 253).

The Epilogue summarizes again the major issues discussed in this book—stress-induced depression, vulnerabilities, recognizability, and diagnostic strategies.

The book reflects a lot the life-time work of Herman van Praag, who wrote most of this volume (Dr. van Os wrote chapters 5 and 6, and Dr. de Kloet co-authored chapter 8 with Dr. van Praag). His breadth of knowledge, memory and the fact that he has been studying depression for over four decades allows for the use of references from an era almost forgotten, which is, unfortunately, unusual in present-day publications. The book is thought provoking, well written and well organized. The initial clinically and diagnostically oriented chapters are definitely more entertaining and interesting than the rest of the book. The review of monoaminergic systems is a bit too exhaustive and exhausting. The rest of the "biological" part of the book is informative and comprehensive, although a bit lengthy at times. Nevertheless, the book addresses not just whether stress causes depression (it seems that it does, particularly chronic stress and particularly in certain people), but also, among others, the problems of our current diagnostic system. I would recommend this volume to all clinicians and researchers interested in depression and stress; not as required reading, but probably as solid bedtime, scientifically entertaining reading.

Richard Balon, M.D.
Wayne State University
Detroit, Michigan

The Lost Self. Pathologies of the Brain and Identity. Edited by Todd E. Feinberg and Julian Paul Keenan; Oxford University Press, New York, New York; 2005; ISBN 13 978-0-19-517341-3; \$49.95 (hardcover); 275 pp.

It is only a matter of time before every psychological function or experience becomes a focus of neurobiological and neuroscience research and a subject of a quest to find its anatomical location. Interestingly, the latest object of this exploration is the self itself! I say interestingly, because the self is probably not only difficult to localize, but even a bit difficult to define. As Todd Feinberg and Julian Keenan, editors of "The lost self," discuss in their introduction to this volume, the "self" carries with it the notion of identity, of meaning the selfsame (p. 1). They also bring our attention to the fact that there are many different notions of the self, such as the cognitive self, the conceptual self, the core self and many others. They also come to the conclusion that the self is "both a subject and an object of itself." Drs. Feinberg and Keenan state that they consider both these aspects of the self in their book, but they "focus of special and particular aspects of the self, namely: What happens to the self in certain neuropathological conditions? And what can these conditions teach us about the neurobiology of the self?" They gathered a group of thirty interested neuroscientists, psychologists, philosophers and