Stress Science Comes of Age

A review of

The Handbook of Stress Science: Biology, Psychology, and Health
by Richard J. Contrada and Andrew Baum (Eds.)

Reviewed by
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Once derided as an empty suit—“Everything that happens in life is stressful, and everything that you do is coping”—the field of stress science has come of age as a vibrant and exciting area of research and practice. The Handbook of Stress Science: Biology, Psychology, and Health is both a tribute to that growth and a major resource for its future development. The Handbook attempts to integrate psychological, biological, and health perspectives—no modest agenda. That it succeeds as well as it does is a tribute both to the editors, Richard Contrada and Andrew Baum, as well as to the more than 100 contributors.

The Handbook is designed to be a reference volume for researchers and scholars at all levels—from senior investigators to advanced undergraduates—in a range of psychological specialties as well as for educators, health practitioners, and social scientists.

In a useful opening chapter, coeditor Contrada endorses the following definition of stress (based on Cohen, Kessler, & Gordon, 1997): a process in which environmental demands tax or exceed the adaptive capacity of an organism, resulting in psychological and
biological changes that may place persons at risk for disease. Accordingly, the Handbook examines psychological, biological, and health aspects of stress. The chapters are organized into five main sections: Biology; Social Context; Psychology; Behaviors and Mental and Physical Health Outcomes; and Research Methods, Tools, and Strategies.

One of the great strengths of this volume is its attempt to integrate, as far as possible, these areas of emphasis. The organization of the book reflects this effort, but in addition, within each of the individual chapters, there are attempts to build bridges. For example, Smith and Kirby, in their chapter “The Role of Appraisal and Emotion in Coping and Adaptation,” argue that separate literatures have grown up around the two topics of appraisal, stress, coping, and adaptation on the one hand and appraisal and emotion on the other. Following the argument of Lazarus that emotion and stress are two sides of the same coin, they attempt, in my view successfully, to present a unified theoretical framework for the consideration of appraisal, emotion, coping, and adaptation.

Such contributions are valuable in a field with many competing theories. As one wag put it, theories are like toothbrushes—everyone has one and no one wants to use anyone else’s. But of course at some point, consolidation is needed. This Handbook moves the field in that direction.

The Handbook has numerous additional strengths. Foremost among them is the very broad coverage of the field. In its 43 chapters a wealth of material is presented. Those of us who are primarily psychologists—presumably most of the readers of this review—will profit from the extensive coverage of biological and medical topics. The volume is also carefully prepared; typos and other distracting errors are virtually nonexistent. The individual chapters are well written (the editors should receive a lot of credit for this), and the coverage is as up to date as one could expect. Also to the credit of the editors is the fact that, given the vast scope of this handbook, there is surprisingly little redundancy. Finally, there is a thorough and useful index of subjects and authors at the end of the volume.

There are a few shortcomings, although not everyone will find them of equal importance. One of them, for me, is the rather ahistorical nature of most chapters; for example, only passing attention is paid to the pioneering work of Magda Arnold, who paved the way for Lazarus’s work on appraisal. Other pioneers are neglected or omitted. We all stand on the shoulders of giants. Maybe we should learn some of their names, too.

Some topics receive less emphasis than one might wish, as is inevitable. While there are at least four excellent chapters that focus either specifically or substantially on developmental issues (“Stress in Pregnancy,” “Stress, Coping, and Adult Development,” “Stressors and Mental Health Problems in Childhood and Adolescence,” and “Social Network Functions and Health”), treatment of these and related topics might benefit from a more unifying, life-span perspective.

The overwhelming majority of authors are located in the United States. Of the 105 contributors, 94 are from the United States, six are from the United Kingdom, two are from Denmark, and one each is from Germany, Sweden, and Brazil. One hopes a second edition
will represent scholars from a broader range of countries, given the large amount of quality research currently being conducted throughout Europe, in Japan, and elsewhere.

Finally, in such a fast-moving field no book can be as up to date as one would like. However, some important emerging topics, such as epigenetics (e.g., Bird, 2007), are almost completely absent.

The *Handbook* may be less useful for specialists looking for depth in their particular area, but for those who are entering the field or who want to broaden their perspective, I believe that this *Handbook* is indispensible. More than just a contribution to the field, the *Handbook* may well become a classic.

**References**
