

discourse. Efforts toward this end began in 2008 at the annual meeting of the American Psychopathological Association, which featured the topic of causality and psychopathology in research. Chapters evolved as refined versions of talks presented at the meeting. Contributors came from several disciplines: epidemiology, genetics, human development, neuroscience, psychiatry, psychology, and public health.

The 14 papers were arranged within 3 sections: (1) Causal Theory and Scientific Inference, (2) New Methods, and (3) Causal Thinking in Psychiatry. Five chapters within the first section constitute an orientation to causal thinking and psychopathology research. Rich in research methodology, these chapters might also assist clinicians in considering causal factors versus relational “noise” in their patients’ conditions. The authors illustrated why and how to evaluate complex interventions such as system change—a cutting-edge topic largely led by European investigators.<sup>1</sup> In the second section, 5 chapters describe new methods for researching cause in psychopathology. Critiques include studies that turned out poorly when causes for outcomes were not adequately delineated, or when highly controlled research was rolled out prematurely into population-wide applications. In these chapters, the research questions gradually round the corner from “What are the causes of the effect?” to “What are the effects of the cause?”—in particular the interventional cause that begat unintended effects. The last 4 chapters focus on causal thinking in specific areas of psychiatry. Three of these 4 chapters review causal factors in developmental disorders, posttraumatic disorders, and diagnostic criteria. The final chapter argues for more dimensional thinking, beyond that which now exists, as a supplement to categories and diagnoses. Although the latter argument makes sense and holds together deductively, the lack of empirical studies to prove the point limits the chapter’s impact.

All of the chapters delve deeply into one or more content areas within psychiatry, in addition to the chapter focus on epistemology and method. Content topics covered include genetics, neurodevelopment, random controlled studies, psychopharmacology, public health and prevention, and the course of psychopathology. Within this rich framework of method and content, most psychiatrists can locate their own special interests.

Each chapter is a rich feast that takes time to digest fully. As a strategy, I soon set a limit of reading one chapter per week, allowing time to savor and absorb its contents. In areas that most piqued my interest, I reread sections and added notes. Chapters 2 and 3 helped me in tackling a thorny project involving a novel, multifaceted intervention apt to exhibit unpredictable results. Other readers would no doubt home in on different chapters.

As a reader of *The Journal of Clinical Psychiatry*, you would very likely change your perspectives on causality in psychiatry as a result of surveying this book. Notions based on single causation theory, rarely applicable to any chronic or recurrent disorder, would probably lose whatever grip they might still have on you. In their place might evolve new ideas involving sophisticated multiple-plus-probabilistic causal models. You would give renewed consideration to the causes of remission and progression, and not just the causes of pathology. And you could not avoid considering how interventions can cause unintended harm or unexpected benefit or both. Your attitudes toward randomized controlled trial studies, principally how and when to apply them (or not), might never be the same.

Who in particular should devote time to skimming parts versus assimilating all of this volume? Researchers of psychopathology, in its various iterations, will add to their knowledge and skill after a thorough reading of the entire text. Teachers at the university level, after a selective scan, should be better able to fathom when to label studies as probably causal as opposed to correlational. Curious, thoughtful clinicians might consider the book a valuable update if they are not familiar with such latter-day terms as

### **Causality and Psychopathology: Finding the Determinants of Disorders and Their Cures**

edited by Patrick E. Shrout, PhD; Katherine M. Keyes, PhD, MPH; and Katherine Ornstein, MPH. In book series: American Psychopathological Association, Oxford University Press, New York, NY, 2011, 364 pages, \$69.50 (hardcover).

For decades, researchers, clinicians, and educators have described psychopathology studies as being descriptive or correlational, rather than causal. Yet, clinicians recommend and apply therapies with the belief that they will produce changes in the course of disorder. In the name of prevention, our institutions fund programs expected to reduce the prevalence of future health problems. Educators teach the workings of the nervous system as though its functions were factual. “Cause-effect” thinking does indeed exist, albeit sometimes scorned by purists as evidencing shoddy reasoning.

The editors set their goal on restoring causal explanations, releasing them from their suppressed status back into reasoned

*natural confounding or interventionist model of causation*—new terms for me, but now riveted in my vocabulary. If your third party payer has reduced your professional life to counting widgets and thoughtlessly obeying imposed protocol rules, this book could change your life irrevocably.

In sum, this book can guide those psychiatrists interested in methods most apt to produce causal information in psychiatry. As one of the contributors emphasizes (see page 73), much psychiatric research deduced from general laws—and applied to specific clinical situations—is unlikely to benefit psychiatry due to the absence of “deep and broad laws” at the core of psychiatry. Instead, causation is most apt to be clarified by inductive studies into the following: psychopathology and genetics, the progression or remission of disease course over time, interventions whether for treatment or prevention, and naturalistic experiments

allowing perspicacious investigators to detect the causal golden nuggets hidden deep within historical mudslides.

#### REFERENCE

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