book review

What is Addiction?


Reviewed by Dean R. Gerstein, Claremont Graduate University

This is a serious programmatic book intended mainly for an academic research audience. There is food for thought here, some of it quite interesting for clinicians, although there is only a glancing attention to clinical cases, programs, or approaches. The editors who commissioned these chapters (with each one also contributing one) are an unusual foursome of philosophers and economists, one of whom directs the Centre for the Study of Gambling at University of Salford, U.K. They have assembled an international array of faculty (albeit all in predominantly English-speaking countries), mainly from the disciplines of neuroscience, behavioral psychology, behavioral economics, and philosophy.

The authors focus broadly on the addictions, but virtually every one considers pathological gambling to be a fully fledged member of that family. The ideas formulated and discussed throughout can be readily understood as a short suite of potential answers to the question, “What is gambling addiction?” In the introduction, editors Ross and Kincaid go so far as to acknowledge, “Some readers may be surprised by the degree of attention devoted in this book to pathological gambling.” (p. ix)

Aside from the dearth of clinical studies, there is another area that gets limited attention. As another of the editors acknowledges, “There is little direct discussion in this volume of social factors in addiction” – while hastening to note, “Whether it is needed is, of course, an open question” (Kincaid and Sullivan, p. 368). The question is not so open here—most of these authors implicitly concur in the severe logic of one explicit critical judgment, namely that “diagnostic criteria must not make reference to factors extrinsic to the subject,” such as the state of the subject’s social relationships resulting from or relating to their gambling activities (Manson, p. 378).

There is, to be sure, plenty left to talk about in the book’s sixteen chapters (by thirty authors), which comprise well over 400 pages of small print in a 7x9-inch format.
The editors have done an excellent job with technical wordsmithing, assuring that dense material is as clear and assimilable to the patient reader as material that is lightweight. The key to the density of the material lies in the two most paginated entries in the index: “anticipation/prediction” and “hyperbolic intertemporal discounting.” Exemplary of the lighter strains is a chapter whose leading and concluding sentences open notably often with the observation, “Intuitively…”

In general, the editors set out to document (mostly as proponents rather than observers or critics) a fairly big claim in the field of addiction studies, namely, that the junction between cognitive neuroscience and behavioral economics is not simply one of the respectable peripheries or disciplinary territories of the field, but is its very core, with scientific hegemony over the definition, investigation, and management of addiction.

This goes beyond the familiar NIDA-forged legitimating slogan that addiction is a brain disease (a millennial wrinkle on the old saw that “alcoholism is not a disease of the elbow”). According to most of the authors here, addiction derives from a revealing aberration in the workings of an intricate organic timepiece—specifically, the biological clock that measures the passage of future time in the brain’s temporal imaging center. The addict’s sufferings—which, in the view of most contributors and summarized in the final “policy implications” chapter by editor Collins, are greatly amplified by an irrational set of modern public policies—are rooted in a fundamental feature of mental calculation. Our imaginations march to a relativistic drumbeat, in which time is not a straight line but a curved one—possibly two curved ones—disappearing around the bend, and this leads to characteristic instabilities in all of our preferences over time, and particularly a tendency to overvalue in the present experience that happens “shorter, sooner” rather than “longer, later.” In the silent calculations that compose our imagination, the future arrives at the wrong speed—and from this flows nearly everything that goes wrong in addiction. And this tendency is easily exploitable by pitiless marketers to turn us into “money pumps,” to their pecuniary benefit—although, again, the nature and control of markets for addictive games or items are not dimensions that these authors, by and large, are interested in pursuing.

So this is the news brought to us by cognitive neuroscience. The evidence behind it, although diligently pursued, is thinner than the theoretical constructs. By and large, this book provides a fine tour of these interesting research areas. But those looking for direct clinical or policy applications guidance will have to look elsewhere.

******