



Book Review

When culture and biology collide: Why we are stressed, depressed, and self-obsessed

By Euclid O. Smith. New Jersey: Rutgers University Press (2002)

Reviewed by Keith S. Harris

We are arguably the most plastic and prolific of creatures. We have adapted to life in the frozen north and at the steamy equator, on the tops of mountains, in barren deserts, along stormy coastlines and perched atop volcanic islands. We multiply equally well in small, quiet, family-size groups and crowded, cramped, noisy cities. We're living longer, healthier, and more comfortably by far than ever before in human history.

Yet despite our ever-growing life span, the miraculous advances in medical knowledge and science, and the everyday conveniences made possible by technological advances, psychologists have turned up no evidence to suggest that we are happier or more satisfied now than we were a hundred years ago, or a thousand years ago, or even fifty thousand years ago.

So what's the problem? Human beings have simply shaped an everyday world for which we were not designed.

Our species evolved with a strong preference for a particular physical and social environment. Evolutionary psychologists call this elusive Eden the "EEA," or *environment of evolutionary adaptedness*. The terrain, weather, flora and fauna were all perfectly suited to Homo sapiens, and we were suited to it. We lived in smallish bands of extended families,

with minimal but optimal levels of inter-group exchange of genes and cultures.

According to E.O. Smith, "the vast majority of our evolutionary history took place in the context of a nomadic lifestyle, with hunting of wild game and gathering of vegetable foods.... we functioned in small groups and with a simple technology until very recently. Survival of the fittest in that archaic environment profoundly shaped our biology—our dietary, health, emotional, and also our psychological needs." (p. 7)

Due to (or in spite of) our intelligence and our aggressive ways, we have been wildly prolific. In just a few millennia we have covered the surface of the planet. Life in the fast-paced, stranger-infested, unnatural world we have created presents us with new opportunities but also exposes us to stressors and temptations that our ancestors would never have encountered.

Smith does an excellent job addressing some of our more elemental internal and social struggles—anger and aggression, the quest for beauty, and the irresistible allure of high-calorie foods.

In an early chapter, Smith uses the phenomenon of "road rage" to illustrate how evolved characteristics, formerly useful, can go awry. His detailed explanations are carefully

supported and fully noted. He covers the territory completely, bringing in everything from anonymity to the presence of psychiatric disorders as precursors and exacerbating factors for this type of aggression.

In a chapter on our fascination with beauty and our obsession with body image, he provides the reader with not only a rendering of the likely evolutionary bases for attractiveness, but a brief history of beauty as well. He offers up a multitude of interesting facts and figures. For example:

In 1894, our ideal woman was five feet four inches tall and weighed 140 pounds. In 1917, the physically perfect woman was five foot four inches tall and weighed 137 pounds. By 1947, she was down to 125 pounds, and by 1975 she was down to 118 pounds despite having increased four inches in height. (p. 62)

In his chapter on diet, Smith explains much about why we crave the foods we do. High calorie, high fat foods would have been extremely valuable to our ancestors. Yet today, unable to appropriately manage our natural tendency to consume every available morsel, we see around us large numbers of overweight people, many with diabetes, heart disease and other risk factors. A study of the U.S. population in 1996 showed that “approximately 35 percent of women and 31 percent of men age twenty and over were obese” (p. 99), this being a significant increase over the percentages only 16 years earlier. Although most of the information provided in this chapter is hopefully not really news anymore, Smith does an excellent job bringing together disparate sources of information and packaging them in a meaningful manner.

For clinicians and consumers of mental health services, the chapter on depression will be the most interesting of the book. He divides depression into a cluster of disorders of two classes: endogenous or melancholic depression,

and reactive depression. As is well supported now, “Data have accumulated to suggest that there is a genetic component to depression” (p. 127). He also explores the idea that depression could have evolved for its adaptive qualities (p. 128).

As Smith notes, the incidence of depression, especially in Western and more technologically advanced cultures, appears to be increasing at an alarming rate. Although he discusses the controversy about whether we are seeing an actual increase in depression, or whether it is only the incidence of its *diagnosis* that has increased, the reader might wonder if it is also possible that as the human lifespan has increased, some of the increase in the incidence of depression may be related to simply having more years available in which to be depressed, especially since there is evidence that recurrent depressive episodes may become more frequent as we age.

After considering the possibility that adapting to increasingly difficult social and physical environmental conditions may have brought with it an increase in depression, his conclusion is somewhat of a tease: “But is there an alternative explanation for the excessive levels of depression seen today?” he asks, and follows this rhetorical question with a paragraph that concludes, “Postmodern introspection has taken over the American psyche, and the boundaries of traditional psychiatry have been invaded by non-clinical approaches and, to some extent, non-scientific thinking” (p. 131).

One indication is that the definitions of mental disorders have been inappropriately expanded, and that psychiatry has benefited. Although psychiatrists also see patients with psychotic and anxiety disorders, “depression now accounts for two-thirds of patient visits to psychiatrists [and is] the most common mental health disorder in the United States” (p. 132).

Smith explains that “Some psychiatrists became increasingly aware that what they were treating was not major depression but rather individuals who were profoundly dissatisfied

with the quality of their life” and “the definition of mental illness has become so diluted that it is no longer meaningful” (p. 132).

Nonetheless, for patients who report depressive symptoms, the primary treatment of choice by both psychiatrists and insurance carriers has been medication. Antidepressants come in various types, the newer SSRI’s much more expensive than the older tricyclic medications. The author is skeptical about the benefits of antidepressant drugs, and rightly so. However, many practitioners would believe his worry about side effects is not as compelling an argument as the lack of demonstrated efficacy.

For example, according to the book, one study showed that between one and four percent of patients reported transient side effects from one antidepressant (sertraline); but it is common knowledge that a significant percentage of patients unknowingly taking placebos also report side effects. The book also reports that there have been two cases of men having unspecified but “severe” side effects upon discontinuation of paroxetine, and suggests this is “cause for concern” (p. 143). Considering the tens of thousands, perhaps hundreds of thousands of people who have taken this medication over several years, two such complaints would seem an acceptable risk—if the benefit were significant.

But many practitioners are much more concerned that these medications have too little beneficial effect for too many patients to make them viable, first-line treatments. A substantial number of patients who take placebos report not only side effects but improvements in symptoms as well, suggesting that much of the benefit of antidepressants is simply placebo effects.

Talk therapy is generally much more expensive in the short run, although also more likely to prevent relapses in the longer run. When appropriate patient selection standards are used, the outcomes from talk therapy rival or exceed those of drugs, and as the author points out, the combination of drugs and talk therapy produces

the best and most resilient benefits.

However, insurance companies are reluctant to fund talk-therapy treatments for an extended length of time, and Smith concludes that “the avarice and greed of many insurance companies” is one of the primary factors in the “epidemic of depression” in the U.S. (p. 153).

Ironically, this appears to be a view shared by many Americans, who would not themselves pay out of pocket for “just talking,” but who believe insurance companies could somehow pick up the costs of talk therapy without raising rates for the beneficiaries. An alternate point of view is that when the public believes in, asks for, and is willing to pay the costs of insuring themselves for talk therapy, insurance companies will respond to market forces by providing such benefits.

In the last chapter, “Welfare, Cooperation and Evolution,” Smith provides a useful and interesting account of the development of the so-called welfare state. He successfully bridges the related topics of altruism, the naturalistic fallacy, and various economic theories. (E.g., what internal forces cause people to willingly forgo certain short-term gain for the more distant possibility of long-term advantage?)

Although cooperation and reciprocal relationships are typically found among social animals, humans are remarkably altruistic. We take care of our sick, weak and old. Evidence of such caring goes deep into our history: “...our ancestors had diverged from the widespread laissez-faire attitude of nonhumans toward injured or debilitated conspecifics and adopted a pattern of helping that sets humans apart from other species” (p. 178)

Natural, advantageous altruism evolved into social welfare beginning in the 1600s. Then as now, “People feared that individuals [on welfare] would come to rely on assistance and not be motivated to work, or, if they did work, they might not be inclined to save any of their earnings” (p. 179). The set of problems associated with institutionalized altruism is yet another example of how an evolved human characteris-

tic, originally quite valuable for our survival, can take on a completely different cast in the modern world.

This book will be completely accessible to laypersons, and yet equally thought provoking for scientists. As the author reminds us, we are the only species that can consciously choose which of its innate tendencies are worth following. Choosing wisely will perhaps require a greater degree of consciousness than we have shown to date.

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