# Is Depression an Adaptation?

A Review of

*The Depths: The Evolutionary Origins of the Depression Epidemic*
by Jonathan Rottenberg
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Evolutionary models of depression have become increasingly popular in recent years. Nesse (2000), for example, published a provocative piece in the *Archives of General Psychiatry* arguing that the symptoms of mild depression may provide a fitness advantage in certain situations. Subsequently, Andrews and Thomson (2009a) published an influential article in *Psychological Review* maintaining that depression increases attention and problem-solving abilities. In the popular press, recent articles presenting an evolutionary model of depression have appeared in *Scientific American* (Andrews & Thomson, 2009b), *The New York Times* (Lehrer, 2010), and *The Atlantic* magazine (Gabriel, 2012), among others. Now, Jonathan Rottenberg, a psychologist at the University of South Florida, has published a new book, *The Depths: The Evolutionary Origins of the Depression Epidemic*. The book is well written and easy to follow, containing much useful, scientifically derived information written for a lay audience.

First, Rottenberg discusses data showing that more than 30 million U.S. adults meet criteria for a depressive disorder and more than 27 million Americans take antidepressant medication. Indeed, it does seem as if there is a depression epidemic. Moreover, the data suggest that depression appears to be starting at an earlier age. Rottenberg cites data showing that more 18- to 29-year-olds have experienced depression than those ages 60 and older. It appears that depression is both ubiquitous and escalating in frequency.

Rottenberg goes on to assert that our current ways of understanding depression, based on defect/disease models, are "broken" (p. 12) and we need a new way of understanding depression, one based on evolutionary theory and the affective sciences. Rottenberg cites much evolutionary research showing the benefits of a sad mood. He discusses depressive realism research demonstrating that people who are mildly depressed are better able than those who are not depressed to judge how much control they have over the onset and offset of blinking lights when pushing buttons. He argues that sad mood "makes people more deliberate, skeptical, and careful in how they process information from their environment" (p. 26). Sad mood also helps us to disengage from unattainable goals. When one has lost a relationship or failed at achieving some goal, staying in bed helps one "prevent calamity

even while perpetuating misery" (p. 29). Low mood and disengagement, according to Rottenberg, help us to "stop what we are doing, assess the situation, draw in others, and if necessary, change course" (p. 28).

Subsequent chapters emphasize animal depression to show the universality of low mood and focus on social losses as the cornerstone of depressive experiences. As Rottenberg says, "The road to understanding depression runs through bereavement" (p. 66). In the final chapters, Rottenberg focuses on the treatment of depression. He tends toward an eclectic approach, stating, "The mood science approach invites the sufferer to browse all the depression books in the store" (p. 183).

Another important component of *The Depths* is Rottenberg's discussion of his own depression. Rottenberg states that he was in a depressive episode for more than four years and was hospitalized for one month at Johns Hopkins University's affective disorders unit. Rottenberg shows much courage in discussing his own severe depression, and the final chapter has many useful suggestions for how to reduce the stigma of the disorder.

Yet, despite the strong scientific framework to the book, it was never clear to me how an evolutionary approach could explain severe depression. Rottenberg argues that "our capacity for deep depression is an evolved response, and one with a purpose: to organize disengagement" (p. 118). As someone who has coped with severe depression his entire adult life, I have never found that staying in bed for days on end or having severe self-deprecating and suicidal thoughts organized anything. The benefits of low mood and milder forms of depression seem clearer to me.

In a related vein, notably absent from the book is any discussion of suicide. There is a robust, scientific literature on suicide (e.g., Joiner, 2005), and I wish Rottenberg had at least some discussion of how a scientific framework could explain suicide. It was also never clear to me how an evolutionary perspective could explain the recent increases in the rates of depression or explain why depression appears to be beginning at an earlier age. The book fails to discuss how social factors may have led to these increases. Recent research suggests, for example, that American community life has disintegrated over the last 40 years (Putnam, 2000). Moreover, more people than ever are living alone, and our technological society continues to increase our physical isolation from each other. Increasing income inequality has also added to despair and the loss of hope. All these societal factors, to me, play a critical role in the depression epidemic.

I would have also liked to have learned more about Rottenberg's own depression and recovery. Rottenberg doesn't discuss at all what caused his depression or what helped him recover. Finally, although Rottenberg is critical of the disease/defect model of depression, his recommendations for treatment are often right out of those models, and it is unclear what new treatment recommendations could come out of an evolutionary approach to understanding depression.

Rottenberg titles his final chapter "The Glory of Recovery," calls people who are depressed "sufferers," and tells readers that he told his daughter, "I think I'm going to be one of the lucky ones" (p. 178) in not having had a relapse since his four-year-long depressive episode. Although I understand the importance of giving people hope, doesn't using words like *recovery* and *sufferer* imply that depressed people are dealing with a disease or defect? Moreover, doesn't seeing recovery as glorious or feeling lucky because one doesn't get depressed negate the discussion of the benefits of low mood?

I don't mean to be too critical of Rottenberg. He is brave to discuss his own depression, and. as he notes, there are many unknowns in the research literature on depression. Overall, *The Depths* is a rich, scholarly work. I would recommend it to clients and others seeking a sophisticated, state-of-the art scientific approach to understanding depression.

## References

Andrews, P. W., & Thomson, J. A., Jr. (2009a). The bright side of being blue: Depression as an adaptation for analyzing complex problems. *Psychological Review*, *116*, 620–654. http://dx.doi.org/10.1037/a0016242    PsycINFO →

Andrews, P. W., & Thomson, J. A., Jr. (2009b, August 25). Depression's evolutionary roots. *Scientific American*. Retrieved from http://www.scientificamerican.com/article/depressions-evolutionary/

Gabriel, B. (2012, October 2). The evolutionary advantage of depression. *The Atlantic*. Retrieved from http://www.theatlantic.com/health/archive/2012/10/the-evolutionary-advantage-of-depression/263124/

Joiner, T. (2005). *Why people die by suicide*. Cambridge, MA: Harvard University Press. PsycINFO →

Lehrer, J. (2010, February 25). Depression's upside. *New York Times Magazine.* Retrieved from http://www.nytimes.com/2010/02/28/magazine/28depression-t.html?pagewanted=all&_r=0

Nesse, R. M. (2000). Is depression an adaptation? *Archives of General Psychiatry*, *57*, 14–20. http://dx.doi.org/10.1001/archpsyc.57.1.14    PsycINFO →

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon & Schuster. http://dx.doi.org/10.1145/358916.361990    PsycINFO →