


## [Feeling Sad Makes Us More Creative](#)

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For thousands of years, people have speculated that there's some correlation between sadness and creativity, so that people who are a little bit miserable (think Van Gogh, or Dylan in 1965, or Virginia Woolf) are also the most innovative. Aristotle was there first, stating in the 4th century B.C.E. "that all men who have attained excellence in philosophy, in poetry, in art and in politics, even Socrates and Plato, had a melancholic *habitus*; indeed some suffered even from melancholic disease." This belief was revived during the Renaissance, leading Milton to exclaim, in his poem *Il Penseroso*: "Hail, divinest melancholy/whose saintly visage is too bright/to hit the sense of human sight." The romantic poets took the veneration of sadness to its logical extreme, and described suffering as a prerequisite for the literary life. As Keats wrote, "Do you not see how necessary a World of Pains and troubles is to school an intelligence and make it a soul?" Well, it turns out the cliché might be true after all: Angst has creative perks. That, at least, is the conclusion of [Modupe Akinola](#), a professor at Columbia Business School, in her paper "The Dark Side of Creativity: Biological Vulnerability and Negative Emotions Lead to Greater Artistic Creativity." The experiment was simple: She asked subjects to give a short speech about their dream job. The students were randomly assigned to either a positive or negative feedback condition, in which their speech was greeted with smiles and vertical nods (positive) or frowns and horizontal shakes (negative). After the speech was over, the subjects were given glue, paper and colored felt and told to create a collage using the materials. Professional artists then evaluated each collage for creativity. In addition, Akinola also measured DHEAS (dehydroepiandrosterone), an endogenous hormone that blunts the effects of stress hormones like cortisol. (As I've written about before, [depression is closely entangled with chronic stress](#).) Given this chemical power, it's not surprising that low levels of DHEAS have been associated with susceptibility to volatile mood swings and downward spirals of sadness. Finally, subjects were also asked to self-report their moods, giving the scientists a subjective and objective measurement of how they were feeling, and how the feedback to the speech had shifted their emotional state.

Not surprisingly, positive feedback cheered us up: Participants who received smiles and nods during their speeches reported feeling better than before. Negative feedback had the opposite effect – it's no fun having our dreams trampled on.

Here's where things get interesting: People who received negative feedback created better collages, at least when compared to those who received positive feedback or no feedback at all. Furthermore, those with low baselines of DHEAS proved particularly vulnerable to the external effects of frowns, so that they proved to be the most creative of all.

What's driving this correlation? Why does a melancholy mood turn us into a better artist? The answer returns us to the intertwined nature of emotion and cognition. It turns out that states of sadness make us more attentive and detail oriented, more focused on the felt collage. [Joe Forgas](#), a social psychologist at the University of New South Wales in

Australia, has spent the last decade investigating the surprising benefits of negative moods. According to Forgas, angst and sadness promote “information-processing strategies best suited to dealing with more-demanding situations.” This helps explain why test subjects who are melancholy — Forgas induces the mood with a short film about death and cancer — are better at judging the accuracy of rumors and recalling past events; they’re also much less likely to stereotype strangers and make fewer arithmetic mistakes.

Last year, Forgas ventured beyond the lab and began conducting studies in a small stationery store in suburban Sydney, Australia. Forgas placed a variety of trinkets, like toy soldiers, plastic animals and miniature cars, near the checkout counter. As shoppers exited, Forgas tested their memory, asking them to list as many of the items as possible. To control for the effect of mood, Forgas conducted the survey on gray, rainy days — he accentuated the weather by playing Verdi’s *Requiem* — and on sunny days, using a soundtrack of Gilbert and Sullivan. The results were clear: shoppers in the “low mood” condition remembered nearly four times as many of the trinkets. The wet weather made them sad, and their sadness made them more aware and attentive.

There are two important lessons of this research. The first is that our fleeting feelings can change the way we think. While sadness makes us more focused and diligent — the spotlight of attention is sharpened — happiness seems to have the opposite effect, so that good moods make us 20 percent more likely to have a [moment of insight](#). The second takeaway is that many of our creative challenges involve tasks that require diligence, persistence and focus. It’s not easy making a collage or writing a poem or solving a hard technical problem, which is why sometimes being a little miserable can improve our creative performance.

In a recent [article](#) in *The New York Times Magazine* on a speculative evolutionary explanation for depression, I touched on some of these ideas:

In a survey led by the neuroscientist Nancy Andreasen, several dozen writers from the Iowa Writers’ Workshop were interviewed about their mental history. Eighty percent of the writers met the formal diagnostic criteria for some form of depression. A similar theme emerged from biographical studies of British writers and artists by Kay Redfield Jamison, a professor of psychiatry at Johns Hopkins, who found that successful individuals were eight times as likely as people in the general population to suffer from major depressive illness.

Why is mental illness so closely associated with creativity? Andreasen argues that depression is intertwined with a “cognitive style” that makes people more likely to produce successful works of art. In the creative process, Andreasen says, “one of the most important qualities is persistence.” Based on the Iowa sample, Andreasen found that “successful writers are like prizefighters who keep on getting hit but won’t go down. They’ll stick with it until it’s right.” While Andreasen acknowledges the burden of mental illness — she quotes Robert Lowell on depression not being a “gift of the Muse” and describes his reliance on lithium to escape the pain — she argues that many forms of creativity benefit from the relentless focus it makes possible. “Unfortunately, this type of thinking is often inseparable from the suffering,” she says. “If you’re at the cutting edge, then you’re going to bleed.”