Our Brain's Negative Bias

Why our brains are more highly attuned to negative news.

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Why do insults once hurled at us stick inside our skull, sometimes for decades? Why do some people have to work extra hard to ward off depression?

The answer is, for the same reason political smear campaigns outpull positive ones. Nastiness just makes a bigger impact on our brains.

And that is due to the brain's "negativity bias": Your brain is simply built with a greater sensitivity to unpleasant news. The bias is so automatic that it can be detected at the earliest stage of the brain's information processing.

Take, for example, the studies done by John Cacioppo, Ph.D., then at Ohio State University, now at the University of Chicago. He showed people pictures known to arouse positive feelings (say, a Ferrari, or a pizza), those certain to stir up negative feelings (a mutilated face or dead cat) and those known to produce neutral feelings (a plate, a hair dryer). Meanwhile, he recorded electrical activity in the brain's cerebral cortex that reflects the magnitude of information processing taking place.

The brain, Cacioppo demonstrated, reacts more strongly to stimuli it deems negative. There is a greater surge in electrical activity. Thus, our attitudes are more heavily influenced by downbeat news than good news.

Our capacity to weigh negative input so heavily most likely evolved for a good reason—to keep us out of harm's way. From the dawn of human history, our very survival depended on our skill at dodging

danger. The brain developed systems that would make it unavoidable for us not to notice danger and thus, hopefully, respond to it.

All well and good. Having the built-in brain apparatus supersensitive to negativity means that the same bad-news bias also is at work in every sphere of our lives at all times.

So it should come as no surprise to learn that it plays an especially powerful role in our most intimate relationships. Numerous researchers have found that there is an ideal balance between negativity and positivity in the atmosphere between partners. There seems to be some kind of thermostat operating in healthy marriages that almost automatically regulates the balance between positive and negative.

What really separates contented couples from those in deep marital misery is a healthy balance between their positive and negative feelings and actions toward each other. Even couples who are volatile and argue a lot stick together by balancing their frequent arguments with a lot of demonstrations of love and passion. And they seem to know exactly when positive actions are needed.

Here's the tricky part. Because of the disproportionate weight of the negative, balance does not mean a 50-50 equilibrium. Researchers have carefully charted the amount of time couples spend fighting vs. interacting positively. And they have found that a very specific ratio exists between the amount of positivity and negativity required to make married life satisfying to both partners.

That magic ratio is five to one. As long as there was five times as much positive feeling and interaction between husband and wife as there was negative, researchers found, the marriage was likely to be stable over time. In contrast, those couples who were heading for divorce were doing far too little on the positive side to compensate for the growing negativity between them.

Other researchers have found the same results in other spheres of our life. It is the frequency of small positive acts that matters most, in a ratio of about five to one.

Occasional big positive experiences—say, a birthday bash—are nice. But they don't make the necessary impact on our brain to override the tilt to negativity. It takes frequent small positive experiences to tip the scales toward happiness.