Ode to Joy and Serenity and Curiosity and ...

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Young patas monkeys love to play tag on the savannahs of West Africa, and they have an odd play habit. When they are being chased, they fling themselves on to saplings, which bend and catapult them in unexpected directions. This exuberant and quirky behavior disappears as the speedy red monkeys grow into adulthood, with one exception: When fleeing a predator, adults will fling themselves on to saplings, which bend and catapult them to escape.

University of North Carolina psychologist Barbara Fredrickson uses the antics of patas monkeys as both an example and metaphor for her "broaden and build" theory of positive emotions. The young monkeys are engaging in pointless fun, just for the sheer joy of it — or so it seems. In fact, their joy and play are creating a reserve of body memories that — way down the line — could keep them alive.

Positive emotions are life savers. That is Fredrickson's answer to a question that has perplexed psychologists for years: What are positive emotions for? The survival value of negative emotions is obvious: Fear helps us avoid attackers, disgust alerts us to poisons, and so forth. But what possible good are joy, contentment, gratitude, and curiosity? Fredrickson believes that these emotions increase cognitive flexibility, trump harmful negativity, and create a reservoir of resilience that helps us cope with life's travails. She pulls together some of her most provocative and convincing studies in a new book, *Positivity* (Crown Publishers).

Consider this deceptively simple experiment. Fredrickson, who is a former member of the APS Board of Directors, used lab techniques to "prime" the emotions of a large group of volunteers. Some were primed for amusement, some for serenity, still others for anger or fear or nothing at all. Then she asked them simply to make a list of things they would like to do at that moment. Those who were amused or serene listed significantly more possibilities than did the others, suggesting that their minds were more open to ideas and more exploratory. She ran a similar experiment with abstract shapes and found that the positive thinkers were more apt to see hidden patterns and to make connections. Those who were angry or fearful were too narrowly focused on details to see the big picture.

This is what Fredrickson calls "broadening," and she had shown this cognitive benefit time and again in a variety of studies. But what is the value of such openness beyond the moment? This is where it gets really interesting. Fredrickson has shown that these moments of serenity or amusement have an accumulative effect over time. They break down the barriers between self and others, and they build trust. In short, positivity creates open-mindedness, which sparks even more good feelings, creating an upward spiral of emotions. This is the "building" for the future: Over time, those with the most positive moments become more mindful and attentive, more accepting and purposeful, and more socially connected.

And healthier. This is the hidden and unanticipated benefit of laughter and peacefulness and thankfulness, according to Fredrickson's studies. Positive emotions apparently work as an antidote to

negativity. Fredrickson proved this by stressing people out with a public speaking task; this task made them predictably anxious and also pumped up their heart rate, their blood pressure, and other signals of stress. Then she had them watch movies: some joyful or serene, others sad. She found that the positive emotions literally trumped the anxiety, undoing the body's stress response and returning the joyful and serene viewers to a steady state much more rapidly than the others. Because elevated heart rate and blood pressure can cause a range of serious health problems over time, Fredrickson concludes that positivity is literally life-saving.

Fredrickson has been building her theory for many years, and broadening it with new ideas and rigorous laboratory evidence. *Positivity* is an accessible and inspiring version of this project.

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