

The Business Brain

The key to your relationships lies deep in your brain

Sunday, January 30, 2011

SUSAN PINKER

Imagine an internal organ that reflects the capacity of your Rolodex, determining how many people you're biologically primed to meet-and-greet each day. And the bigger this body part, the larger and richer your social sphere. If there are parts of your brain dedicated to remembering songs, names and places, might there be a processing unit in the brain for social relationships, too?

According to a new study, the answer is yes. That organ is the amygdala, an almond-shaped neural structure that plays a starring role in processing our motivations and fears. "The amygdala works in concert with other brain structures to help you remember whether you've met someone before, and whether that person is someone to trust or avoid, whether they will co-operate or compete," says Lisa Feldman Barrett, a professor of psychology at Northeastern University in Boston and one of the principle authors of the study.

A sixth sense for distinguishing friends from foes is a key feature of business acumen, of course, and it also has a long evolutionary history. Social knowledge evolved in all group-living primates. For example, most baboons remember the pedigrees of their fellow group members – not only who begat whom, but also who won or lost the latest scuffles over food or a high-ranking female.

While scientists knew that animals living in larger social groups have larger amygdalae, this is the first time the link has been shown in humans, says Professor Feldman Barrett. That's one of the study's findings – that an ancient part of our brain registers not only how many people we like to interact with day to day, but also how complex that social world is.

The second finding is even more intriguing. It shows that amygdala size – and related social network size – varies from person to person. This means that some of us can handle an expansive social circle filled with myriad clients, glad-handers and associates, while others are biologically set to interact comfortably with just a few people, perhaps their closest family members and friends.

We usually call these folks extroverts and introverts, respectively. Now we know that a distinct biological mechanism underlies those categories. "For the most part, these are innate differences that account for our social strengths and weaknesses," says Brad Dickerson, an associate professor of neurology at Harvard Medical School and another author of the study. That capacity varies "quite a bit" from person to person, he says and "is the kind of thing we're born with."

While there is no evidence that practising your social skills will enlarge your amygdala (the way London taxi drivers acquire a larger hippocampus after years of developing "the knowledge" – detailed mental maps that allow them to navigate the city), the idea that you can develop an appetite for grooming a large number of social contacts is not that far-fetched.

"The brain is a use-it-or-lose-it organ. The more you use certain brain structures, the bigger they get," says Dr. Feldman Barrett, adding that "it's possible that people endowed with a bigger amygdala – controlling for their overall brain and body size – have a more social temperament. But it's also possible that people who are thrust into socially demanding situations develop larger amygdalae."

Probably both forces are at work. People who are keen to develop large social networks may have amygdalae that are biologically set to larger parameters, and their day-to-day experience reading people hones their skills further.

Though the possibility that you can develop your amygdala through intense practice is "uncharted territory," says Dr. Dickerson, it's worth considering that the ability to interact easily with a large group of people is a discrete skill that head-hunters and recruiters should look for. "Anyone in business knows that people who are good at interacting with other people can be talented entrepreneurs, and this may have nothing to do with language or intelligence," he says.

Still, bigger isn't always better. One of the amygdala's jobs is to signal the importance of a face-to-face social encounter, so "you have a counterbalancing tendency to be more attuned to others' emotions, to be worried about all sorts of things that are purely speculative," says Dr. Dickerson. In other words, you're more neurotic.

Most of us recognize this equation. The opportunity to expand our networks is one thing. The cost is something else.

*Susan Pinker is a psychologist and author of *The Sexual Paradox: Extreme Men, Gifted Women and the Real Gender Gap*.*