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It's Good to Be the Top Banana

Stress has less effect on high-ranking baboons—and British civil servants

By JONAH LEHRER

It's not easy being an alpha male. Just ask one of the high-ranking baboons living in the Amboseli region of Kenya. Although these males get all the girls, and tend to abuse their lowly peers, their power comes with a steep cost: They're stressed-out. In fact, many alpha males exhibit the highest levels of stress hormone in the entire troop. This is largely because they must work hard to keep their social position, fending off young upstarts and engaging in elaborate courtship rituals that can drag on for days. Uneasy lies the head that wears a crown.

At first glance, such stress levels would suggest that these powerful baboons suffer from serious health problems. After all, chronic stress exacts a terrible toll on the body. Though stress doesn't cause any single disease, it makes most diseases worse—from the common cold and lower-back pain to cardiovascular disease.

Numerous studies of human longevity in developed countries have found that psychosocial factors such as stress are the single most important variable in determining the length of a life. It's not that genes and risk factors like smoking don't matter. It's that our levels of stress typically matter more.

And yet, according to a study led by a scientist at the University of Notre Dame, those baboons with the most power suffer from the fewest illnesses and are three times more likely to recover from an injury than those at the bottom of the social hierarchy.

This groundbreaking research—the result of 27 years of tracking primates in the wild—suggests that the problem isn't chronic stress per se. Rather, it's the way that stress interacts with our social status, which is why chronic anxiety is so much more deadly for those at the bottom of the pecking order.

There's suggestive evidence that similar lessons apply to

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Baboons at the top of the social hierarchy have to exert themselves more. But they can choose the time and place.

humans. Just look at the Whitehall study led by Michael Marmot, a professor of epidemiology and public health at University College London. He's tracked the health and welfare of some 28,000 British civil servants over the last 40 years—a group compelling in its uniformity. They all have access to the same health-care system, rarely have to worry about getting laid off and spend most of their days at their desks.

This group has one other ideal feature: It's very hierarchical, with a precise classification scheme for ranking employees. It's the human equivalent of a baboon troop. The clear pecking order allowed Dr. Marmot to study how social status affects health.

The influences were dramatic. Dr. Marmot was able to show that between the ages of 40 and 64, workers at the bottom had a mortality rate four times higher than that of people at the top. Even after accounting for genetic risks and behaviors like smoking and binge drinking, the lowest-ranked civil servants still had nearly double the mortality rate of those at the top.

But the Whitehall results aren't a straightforward analysis of stress, at least not as it's usually defined. Like those alpha-male baboons, people in leadership positions are often subject to extreme amounts of pressure. They work longer hours and have more responsibilities than those at the bottom of the bureaucracy.

So why wasn't their stress deadly? To explain this anomaly, Dr. Marmot coined the "demand-control" model of stress, in which the damage caused by chronic stress depends not just on the demands of the job but on the extent to which people can control their response to those demands.

And this returns us to those baboons. Although the alpha males were certainly stressed, they had control over their stressful encounters, choosing when to engage in aggression and courtship. Furthermore, these powerful primates were far more likely to unwind after a rough day, with a grooming session or friendly encounter with a female. These pleasurable activities—the consolations of power—helped them counteract the lethal strains of their leadership position.

Stress matters. But social status matters even more.

Write to Jonah Lehrer at jonah.lehrer@dowjones.com

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