SundayReview

It's Easy Being King

Gray Matter

By JENNIFER S. LERNER and GARY D. SHERMAN OCT. 27, 2012

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IN popular culture, stress and leadership go hand in hand. We imagine leaders in government, the military and the private sector as not just hard-working, but also hard-pressed, and suffering mightily for it.

But is that image true? Certainly, leaders may be extremely busy and have great responsibility. Physiological stress, however, is not simply a tally of one's daily responsibilities. Despite the common perception of leaders as especially stressed out, leaders may actually be less stressed than nonleaders.

First, a bit of biology. One way stress is indexed in scientific research is via levels of cortisol, a stress hormone common to humans and many other animals. We all need a constant, low level of cortisol, as well as periodic boosts, so we can respond appropriately to challenges and opportunities as they arise.

Chronically elevated cortisol, in contrast, produces the kind of stress and anxiety that no one needs. In fact, chronically elevated cortisol predicts premature cardiovascular death. (For the purposes of this article, when we use the term "stress," we actually mean cortisol, and not just a subjective sense of anxiety.)

Now consider a close cousin of ours, the baboon, an excellent species for understanding relations between human stress and social rank. Baboons have relatively stable hierarchies, sophisticated social relations and a stress-response system similar to our own. Also, it is possible to collect cortisol samples (via blood or saliva) from baboons at all rungs within a dominance hierarchy.

Collecting such samples from baboons in the wild has been an almost annual activity for the Stanford neuroscientist Robert Sapolsky for over 25 years. Among other things, Professor Sapolsky consistently finds that for baboons, higher social rank is associated with lower cortisol.

Such findings aside, the inverse rank-to-cortisol relationship makes sense: being a leader typically boosts one's sense of control, a critical factor in understanding how the sort of stress factors that come with leadership affect biology. Possessing control over a stressor alters its physiological consequences, including the release of cortisol. Among humans, those who believe they exert substantial control over their lives tend to have lower cortisol levels. Taking all this together, if being a leader provides a boost to one's sense of control, leadership may buffer against stress.

Of course, it is difficult to find real leaders who can participate in a biologically based study and are willing to provide samples of their saliva on a regular basis. Fortunately, we have access to a unique sample of leaders in public service: enrollees in a Harvard University executive education program that attracts midto high-level government officials and military officers from America and around the world.

In two studies, we drew from this unique group and assessed salivary cortisol and anxiety reports, two indicators of stress that provide two different but parallel windows into the stress response. In the first study, we found that leaders (people who indicated that they managed others) had lower cortisol levels and less anxiety than nonleaders whom we drew from the local community. This is true even when

accounting for demographic variables like age, gender, education and income.

Clearly, leaders are less stressed than nonleaders. But do leaders, as a group, enjoy equally low stress levels? Or might differences in rank and power among leaders matter?

To answer this question, we recruited a new sample of leaders. This time, rather than compare leaders to nonleaders, we looked at gradations in power and rank within the group. We found that leaders in more powerful, higher-ranking positions exhibited lower cortisol levels and less anxiety than lower-ranking leaders. Notably, we also found that the lower stress of higher-ranking leaders was explained by their greater sense of control.

When it comes to leadership, it is perceived control and predictability, not simply how busy one is, that matter for stress. High-powered leaders typically have more control, or at least believe that they have more control, so their levels of cortisol and stress are usually just fine. The management gurus and life coaches peddling their stress-reducing strategies to chief executives might do more good by serving those on the lower rungs of the hierarchy.

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