

Tacit Stress: The stuff that kills you.

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Contents for discussion

- The chronic element to stress.
- Arguably affects the strongest (i.e. those who care the most).
- Navy officer case – it is not the peak condition of stress that determines health, it is the residual condition.
- Lower control (e.g. lower in the hierarchy) = higher residual stress.
- Baboon studies and neuroscience.
- We really are beginning to understand this – telomeres.
- Wider social explanations – stressed communities etc.

Karlggaard

- Mirror Neurons :: Salvatore Aglioti
 - Neurons that fire in situations of empathetic response, e.g. sports.
 - Mirror neurons allow us to emulate the actions and feelings of others.
 - Positive mood and empathy seems to travel across the group.
- Sandy Pentland – charismatic connectors, communication dashboard
- Expressions of gratitude – a lot of psychology shows the role of positive reinforcement.
- Spindle cells – incredibly fast decisions transmitted across the body, e.g. as to whether someone is trustworthy.
- Oscillators – regulation physical coordination between people in group activity, e.g orchestra

Robert Sapolsky



The message (from Amabile).

Human beings are designed to handle stress (PRESSURE).

We tend to call it 'pressure' while its still manageable.

pressure can be intense. As long as it is resolvable (or otherwise transient) and shareable, it can be part of the process of good work.

Creativity under the gun:: Amabile

- Low Time Pressure + Little or No Encouragement, Little or No Collaboration, Groups (rather than Individuals): Autopilot → Low Creativity
- Low Time Pressure + Exploration: On an Expedition → High Creativity
- High Time Pressure + No focus: Treadmill → Low Creativity
- High Time Pressure + Focus, Meaningful Urgency: On a Mission → High Creativity

Louise Amabile, Harvard.

The message (from Sapolsky).

Stress hormones retained in the bloodstream lead to worse health outcomes and increased mortality.

People lower in the hierarchy have more stress hormones retained in the bloodstream

(Also a huge UK Civil Service study).

The Lower the Grade, the Higher the Mortality Rate



The Whitehall Studies - The Lower the Grade, the Higher the Mortality Rate

- Lack of control.
- Lack of predictability.
- Uncertainty and fear.
- Humans are engineered for fight/flight, not long-term residual stress.
- Chronic Stress Disorder develops, worsening the immune system developing vulnerability to disease.
- Chronic Stress Disorder is associated with strong team-players, carers, hard-workers.

Elizabeth Blackburn

The Message:

- Telomere deterioration (protective tips on the end of chromosomes) proportionate to severity of stress and duration.
- Compassion promotes repair and potentially longevity
- Even though there is no solution.

Elizabeth Blackburn on the mum's group in California



Martha Farah

How poverty might change the brain

By Elizabeth Landau, CNN

updated 1:56 PM EDT, Thu June 13, 2013



Martha Farah studies the connection between socioeconomic status and the brain at the University of Pennsylvania.

ELIZABETH LANDAU/CNN

Neuroscience and the Law



Alan Alda with Robert Sapolsky of Stanford University - EXTENDED

Further Discussion?