




Hacking the stress system: the stress response as an adaptive trait that can work for or against you

IV - On the intersection between culture and stress



Life-threatening and social stress

- ▶ Acute life threatening stress
 - ▶ Fight or flight response
 - ▶ Social stress
 - ▶ Social standing and position in the hierarchy
 - ▶ Challenges to reproductive success
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How our stress differs from most other mammals I: Anticipation

- ▶ If you can turn on the stress system before a stressor arrives, you are even quicker.
- ▶ Hyperactive Agency Detection
 - ▶ Its better to get scared a 100 times for nothing, than not have a stress response when you really need it.
- ▶ Theory of mind
 - ▶ The anticipation of intention
 - ▶ 5th degree

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How our stress differs from most other mammals II: perception

- ▶ We have a strong tendency to stress over perceived inadequacies rather than real ones
 - ▶ Beauty ideals
 - ▶ Happiness & success
 - ▶ Social media

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Retrospective stress appraisal: did we win?



How our stress differs from most other mammals III: Duration

- ▶ We turn on the stress system for much longer than any other animal
- ▶ Many of the stress related problems we know derive from this ability to be stressed for much longer than any other animal




How our stress differs from most other mammals IV: Projection


- ▶ We have the unique ability to project our stress on other beings
 - ▶ Other people, even those we do not know
 - ▶ Animals
 - ▶ Fictional characters





Agriculture, population growth and specialisation

- ▶ You need a food surplus for some to specialise in other fields than food production.
 - ▶ Political class
 - ▶ Religious class
 - ▶ Warrior class
 - ▶ Problems with population growth and available land
 - ▶ Who inherits?
 - ▶ What do you do with the rest?
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Culture as an emergent property of circumstance

- ▶ What we eat
 - ▶ Where our culture develops
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The cortex & in-group function.

- ▶ Dunbar's number (+/- 150)
 - ▶ Larger groups require
 - ▶ Formal leadership
 - ▶ Codified barter

Dunbar, R. (2010). *How Many Friends Does One Person Need?* Cambridge: Harvard University Press.



Culture and social support

- Growth, support and initiation
- How much time does mom invest in you in your first days
- How strong are the social bonds in your group



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