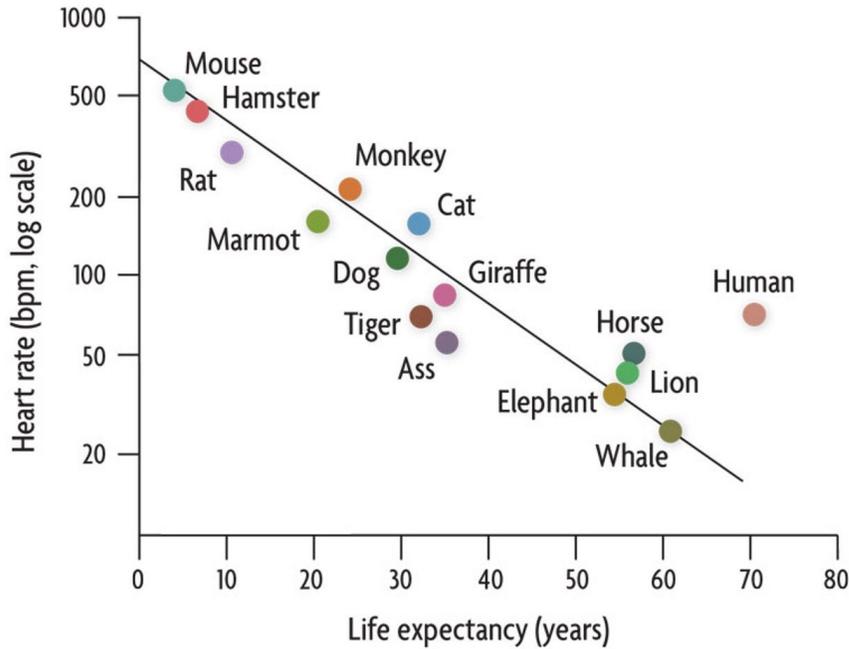


While randomly browsing the internet, I came across the chart below [\[source\]](#). A curious mind should ask, why do smaller animals like mouse and rat live for lesser time than bigger animals like whale and elephant? Before reading further spend some time to form your hypothesis.



Identifying the invariant, that which doesn't change is an excellent problem-solving skill. Let's deconstruct the above chart and see if there's an invariant. What do you see?

	Beats per minute	Life expectancy	Total heartbeats (in billions)
Mouse	500	5	1.3
Cat	150	15	1.2
Horse	44	40	0.9
Elephant	28	70	1.0
Human	60	70	2.2

The total number of heartbeats in the lifetime of an animal converges to one billion. Why did evolution choose one billion instead of 100 billion heartbeats? I don't know. For some reason evolution likes us. It has granted humans between 2 to 3 billion heartbeats.

Small animals like a mouse with 500 bpm use its allotted quota in 5 years. Larger animals like an elephant with 28 bpm use its allocated quota in 70 years. It begs to ask a question on why does the mouse heart beat so quickly?

Blood is a viscous fluid which is carried to all parts of the body by blood vessels. In all animals, the cross-section area of the blood vessels increases with distance from the heart. Bigger cross-section area reduces the drag created by the blood coming into contact with blood vessel walls.

Small animals like mouse don't have enough space in their body to allow for more cross section area. This means that the blood comes into contact with blood vessel walls, and so the mouse heart has to work much harder to overcome the blood resistance to flow. This results in mouse heart beating at 500 per minute and using up all its quota in 5 years.

Evolution generously granted us between 2 to 3 billion heartbeats. The total number of heartbeats one gets during their lifetime is a function of **genes, food, exercise, sleep, and our state of mind**. We can't do much about the genes we inherited from our parents. But we have a lot of control over the other variables.

Lots of people already know about the importance of eating healthy, doing regular exercise, and getting a good night sleep. If they know it, then why don't they follow it? Lack of discipline allows the limbic system to override their prefrontal cortex. They end up falling for instant gratification. Is there a solution? Yes, there is: [what-gets-measured-gets-improved](#)..

A man is literally what he thinks. This means that state of mind is super important in controlling the total number of heartbeats one gets during their lifetime. Lots of people don't understand the importance of calm mind, and they live a stressful life. Dale Carnegie beautifully explains this point. Read, reread, and reflect to etch it in your brain.

I recently had some correspondence with Dr. Harold C. Habein of the Mayo Clinic. He read a paper at the annual meeting of the American Association of Industrial Physicians and Surgeons, saying that he had made a study of 176 business executives whose average age was 44.3 years. He reported that slightly more than a third of these executives suffered from one of three ailments peculiar to high-tension living—heart disease, digestive-tract ulcers, and high blood pressure. Think of it—a third of our business executives are wrecking their bodies with heart disease, ulcers, and high blood pressure before they even reach forty-five. What price success! And they aren't even buying success! Can any man possibly be a success who is paying for business advancement with stomach ulcers and heart trouble? What shall it profit a man if he gains the whole world—and loses his health? Even if he owned the whole world, he could sleep in only one bed at a time and eat only three meals a day. Even a new employee can do that—and probably sleep more soundly and enjoy his food more than a high-powered executive. Frankly, I would rather be a carefree person with no responsibility than wreck my health at forty-five by trying to run a railroad or a cigarette company.

The famous Mayo brothers declared that more than half of our hospital beds are occupied by people with nervous troubles. Yet, when the nerves of these people are studied under a high-powered microscope in a post-mortem examination, their nerves in most cases are

apparently as healthy as the nerves of Jack Dempsey. Their “nervous troubles” are caused not by a physical deterioration of the nerves, but by emotions of futility, frustration, anxiety, worry, fear, defeat, despair. Plato said that **“the greatest mistake physicians make is that they attempt to cure the body without attempting to cure the mind; yet the mind and body are one and should not be treated separately”!** - [How to Stop Worrying and Start Living](#)

Stressful mind triggers your body to release adrenaline, a hormone that causes our heart rate to speed up. Where does this extra heartbeat come from? It comes from our allotted quota of 2-3 billion heartbeats. We are borrowing it from our future to live a stressful life in the present. Is it worth it?

How to live a stress-free life? If I already know the answer, then I wouldn't be writing this post. I came across an excellent tweet while writing this post. Thought it contains several ideas to stop worrying and start living a purposeful life.



Harsh Goenka @hvgoenka · 9h
LIFE GOALS~

1. Make ~~\$10 million~~ *a positive impact.*
2. Find the ~~perfect partner~~ *inner peace.*
3. Collect more ~~luxury items~~ *beautiful memories.*
4. Gain ~~recognition from my peers~~ *more self-confidence.*
5. Make my parents proud of how ~~much I earn~~ *happy I am.*
6. Get ~~more stuff than everyone else~~ *rid of limiting beliefs*
7. Pursue a career that ~~makes a lot of money~~ *I'm excited about!*

Do yourself a favor by buying a copy of [How to Stop Worrying and Start Living](#). Hope that it translates to life with low-to-no stress.

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