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Programmers

# The Stress Equation

Reduce Burnout,  
Increase Happiness and Productivity



Marcus Lagré  
*edited by Julia Watson*

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# Talking About Stress

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*How well do you cope with stress?*

I have lost count of the number of times I have been asked that question over the years, in interviews for jobs or consultancy work.

It's a strange question to ask, because what kind of answer can one expect? Who in their right mind would out themselves as a neurotic when trying to impress the employer with their impeccable skills?

I have never had the guts to turn that question around, though that would have been an interesting experiment to make.

What flaws in your organization, planning, and leadership necessitates you to ask that question?

It's a reasonable question to ask, because stress is costing lives. Not necessarily in a literal sense, even though stress is a proven contributing factor to a vast array of mental and physical ailments.<sup>1</sup> No, when I say it's costing lives, I'm talking about how stress can drain the joy of life from a person. How it can cause negativity and strain that spills over from work life onto private life and stops you from having the energy to do more than eat, sleep, and work.

In Sweden, where I live, stress is the leading cause of mental illness and sick leave among academics and knowledge workers and has been for quite some time.<sup>2</sup> Looking at Gallup's *State of the Global Workplace 2023* report,<sup>3</sup> employees have been reporting an increased feeling of stress over the past decade and a half.

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1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5579396/>

2. [https://www.saco.se/globalassets/start/opinion--fakta/rapporter/2021/2021\\_psykiskt-ohalsa-bland-akademiker.pdf](https://www.saco.se/globalassets/start/opinion--fakta/rapporter/2021/2021_psykiskt-ohalsa-bland-akademiker.pdf)

3. <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>

This would suggest that stress as an occupational health hazard isn't a local problem for the Swedish workforce, but a global trend.

## View Stress as an Occupational Health Risk

What sets stress apart from other areas of occupational health, is the focus on individual susceptibility and coping strategies—something pointed out as early as 1985 by Dean B. Baker in his *The Study of Stress at Work*.<sup>4</sup>

In most other areas of occupational health there are laws, regulations, and recommendations aimed at addressing the hazardous work conditions, to minimize risk for employee health and safety. This responsibility lies with the employer.

For office workers in Sweden this might be applied as ergonomics recommendations and policy on the minimum requirements for an acceptable workstation. For example, it could detail what a good office chair and desk should look like or how often we should be standing up during the work day, so we don't bust our backs. We have appointed safety representatives checking that there are defibrillators on every floor, in the event of a cardiac arrest, and there's at least one fire drill every year.

Even though Sweden has specific regulations aimed at addressing the psychosocial work environments<sup>5</sup>, which includes stress and reasonable workloads, the regulations seem hard to apply in practice, as stress remains a major cause of sick leave.

It would appear that companies have a much harder time being proactive with psychosocial health risks than physical health risks. Companies that I have worked for over the years have offered psychological counseling as part of their health benefit package, but it has almost always been a reactive measure, not kicking in until after a person has gone over the edge into burnout. A little like offering a hard hat to a construction worker *after* getting hit on the head.

Once again, even if offering counseling is a great practice, it focuses on the individual's responsibility for coping and handling the stress. It doesn't focus on fixing the work environment, only the personal perception of it.

I worked for a company struggling with high numbers of burnout within management, who "solved" the problem by introducing personality tests and

4. <https://www.annualreviews.org/doi/abs/10.1146/annurev.pu.06.050185.002055?journalCode=publhealth>

5. <https://www.av.se/en/work-environment-work-and-inspections/publications/provisions/organisatorisk-och-social-arbetsmiljo-afs-20154-foreskrifter/>

subsequently only hired people who scored very high on stress tolerance. Since this was a software company, not an army company where people get sent into combat, I found this to be a questionable practice. Surely there must be something wrong within the organization, if your hiring practices signal that stress tolerance is the most important management skill in software?<sup>6</sup>

Such a hiring practice could potentially create a personality monoculture within management, with even less understanding for stress related issues among the employees.

## Coping With Burnout

I am myself a sufferer of stress. My own personal story was caused by both private and work related issues. When my kids were little, they didn't sleep. I know this is a common story, but my wife and I were suffering badly. For six years both of the children woke us up every night and needed physical closeness to wind down and go back to sleep. Years of disrupted sleep messed up my internal body clock and triggered chronic insomnia.

While that was taking place, my work became increasingly demanding. I was working as a programmer in a team buckling under technical debt and growing conflict within management, which spilled over on us. My inability to perform at work caused a stress loop, that in turn worsened the insomnia.

Eventually, on a Saturday morning, I found myself unable to get out of bed. I could not for the life of me get my legs over the side and get up. For about two weeks I could barely eat, and only managed to leave bed to go to the bathroom. Nature's call is a strong motivator!

I was on sick leave for two months, spending my time with light exercise, meditation, and rest. My wife pulled a heavy load, and I am forever grateful for that. Normally we split all household work and responsibilities 50/50. For weeks and months she did it all, while working full time, which gave me a whole new sense of admiration for single parents. She even slept on a mattress outside our bedroom door, to physically stop the kids from entering at night.

Slowly I came back to life, occasionally even sleeping a full eight hours.

Though I did make a full recovery in the end, burnout comes with scar tissue. Your stress tolerance is never quite the same again. I can only compare it to a torn ligament in the knee. Even though the knee heals, you simply can't put as much weight on it as you used to, so you end up being constantly

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6. <https://hbr.org/2017/04/employee-burnout-is-a-problem-with-the-company-not-the-person>

aware of how much strain you are putting on it. It becomes something you have to be forever mindful of.

I can't fault my employer for my kids waking up every single night, but there were mechanisms at work that were triggering more stress. Through my work as an Agile Coach and openness about my stress history, I have ended up in a lot of conversations and situations where I have collected insights into common stress triggers in software development organizations.

I will try to summarize these insights throughout this book, and while the examples will be software development oriented, I am sure most of it applies to other fields of work as well. One thing that makes software development special though, is the potential amount of complexity and how fast it becomes a source of stress and frustration if not managed properly or taken into consideration when planning.

Before moving on, I think this would be a good time to define stress, so we're on the same page about what we're talking about.

## Define 'Stress'

Almost all definitions of stress—not counting anything relating to materials science or emphasis on important details—is focused on the individual. Stress is ultimately a subjective sensation.

However, when talking to teams about stress, I often find the perception of what stress is, how it feels, and where it comes from to be very narrow. Stress is not always working long hours or a jam packed work calendar. There is more to it than that, more parameters to consider.

When I talk about stress, I use the following definition, because I think it catches the multifaceted nature of stress.

*Mental or emotional strain as a result of adverse or demanding circumstances.*

Mental or emotional strain.

In my experience, emotional strain in software development rarely comes from the work itself, but rather from having to work in a particularly toxic environment. I have personal experience from toxic environments and know the toll it takes. When emotional strain hits you, it is very in your face and almost impossible to ignore, as our entire being forces us to listen. My point is that emotional strain is often noticeable.

The *mental* strain on the other hand is a little trickier to catch, and from my perspective a lot more common in the software profession. As academics,

knowledge workers, or engineers we are spurred by mental challenges, by solving puzzles and analyzing problems. We are probably not always that well equipped to recognize when a mental challenge transitions into mental strain—at least that's my conclusion.

This is especially true for the ambitious among us, who are used to applying ourselves even harder when meeting resistance. The solution is probably just one more push away, so we continue, thinking if we keep at it just a while longer we'll crack it. I have seen many people fall into that trap, including myself.

Similarly, it's easier to identify a demanding circumstance than an adverse one, because they are more in your face.

A demanding circumstances is pretty obvious. There might have been a short deadline, so we had to pull together and plow through work all weekend, but in the end we made it! We recognize them and hopefully understand that we can't have pressing deadlines that necessitate overtime every week or every month. We need some recuperation time before the next demanding circumstance or we will wear ourselves out.

Adverse or unfavorable circumstances are however harder to pinpoint, because there is usually not a single source. Adverse circumstances are often the result of a cocktail effect of several small inefficiencies, annoyances, or conflicts that we have to maneuver around.

On their own, each of them are no big issue, but the sum of them adds up to one large energy vampire or time trap. And they rarely go away on their own. They're always there, unless we actively address and fix them.