Stress Management Basics for Stressed out People

Matthew Wappett Ph.D.





Emma Eccles Jones College of Education & Human Services Institute for Disability Research, Policy & Practice UtahStateUniversity.

Arriving...

I begin with the modest assumption that most people in the U.S. experience chronic, pervasive stress....

2021 Stress Statistics

- The Gallup Global Emotions Report, surveyed 160,000 people in 116 countries during 2020 and early 2021. Their findings show that 2020 "officially became the most stressful year in recent history."
 - Nearly 190 million people experienced significantly higher stress in 2020 than in past years.
 - In 2020, the world was a sadder, angrier, more worried and more stressed-out place than it has been at any time in the past 15 years.
 - 57% of U.S. and Canadian workers reported feeling stress on a daily basis, up by eight percentage points from 2020 and compared with 43% of workers who feel that way globally.
- The American Psychological Association (APA) conducts their Stress in America survey annually. In 2021:
 - 84% of adults reported feeling at least one <u>emotion associated with prolonged stress</u>. The most common were feelings of anxiety (47%), sadness (44%) and anger (39%).
 - Nearly half of parents (48%) said the level of stress in their life has increased compared with before the pandemic.

"We just weren't built to maintain this level of stress and hypervigilance and hyperarousal for this length of time... we are almost at a breaking point with so many stressors, with many of them out of our control."



~C. Vaile Wright Ph.D.

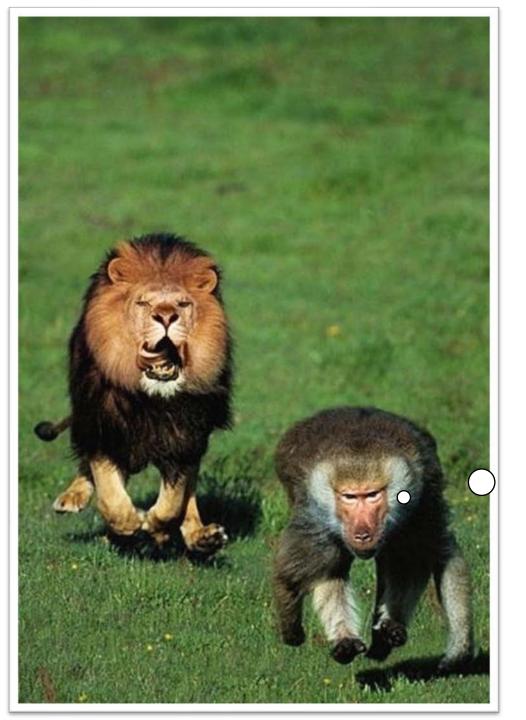
APA Senior Director of Healthcare Innovation

I'm so stressed out over being stressed out that I can't remember why I'm stressed out...and that's stressing me out!



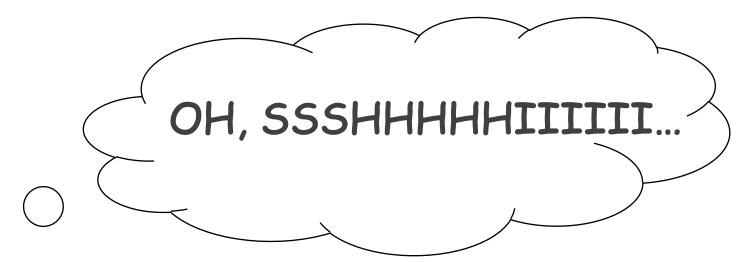
Stress is like a Big Mac...

But what is stress?



The Stress Response

The stress response is also known as the "fight or flight" response (Selye, 1963).



During a stress response the heart starts pumping blood more quickly...this helps get oxygen to muscles and the brain so the animal can properly react to physical danger...like a killer hippo!



Pictured: The proper response to a killer hippo

You experience the **EXACT SAME** stress response by simply being late for work, forgetting a deadline, arguing with a colleague or by getting yelled at by your boss....to your body it's all the same!

To your body, a stressful work environment is basically no different than fighting off a lion or tiger or bear for 40 hours a week...or more!



Different, but the Same!

- There are at least three different types of stress, all of which carry physical and mental health risks:
 - **1. Routine stress** related to the pressures of work, family and other daily responsibilities.
 - 2. Stress brought about by a **sudden negative change**, such as losing a job, divorce, or illness.
 - **3. Traumatic stress**, experienced in an event like a major accident, war, assault, or a natural disaster where one may be seriously hurt or in danger of being killed. Cultural / generational stress also falls into this category
- The body responds to each type of stress in the same way!

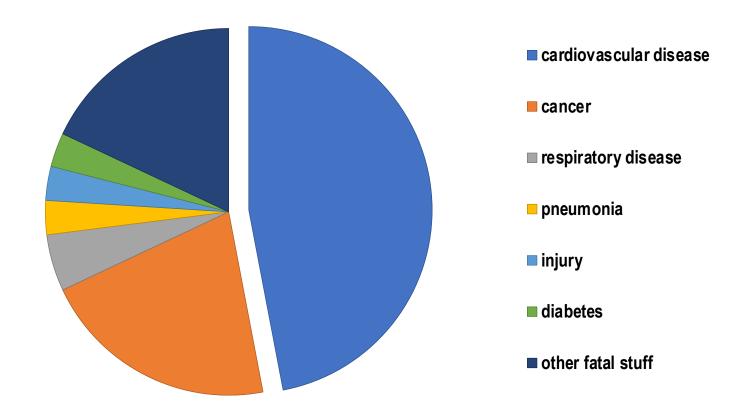
(NIMH, 2013)

Pie Chart of Death

Having a constantly elevated heart rate for long periods of time greatly increases your chance of having a heart attack or stroke.

Cardiovascular disease is the leading cause of death in the WEIRD* world.

*WEIRD = Western, educated, industrialized, rich, democratic



If the stress response is prolonged beyond just a few minutes, the body starts to shut down nonessential processes such as growth, reproduction, and digestion.

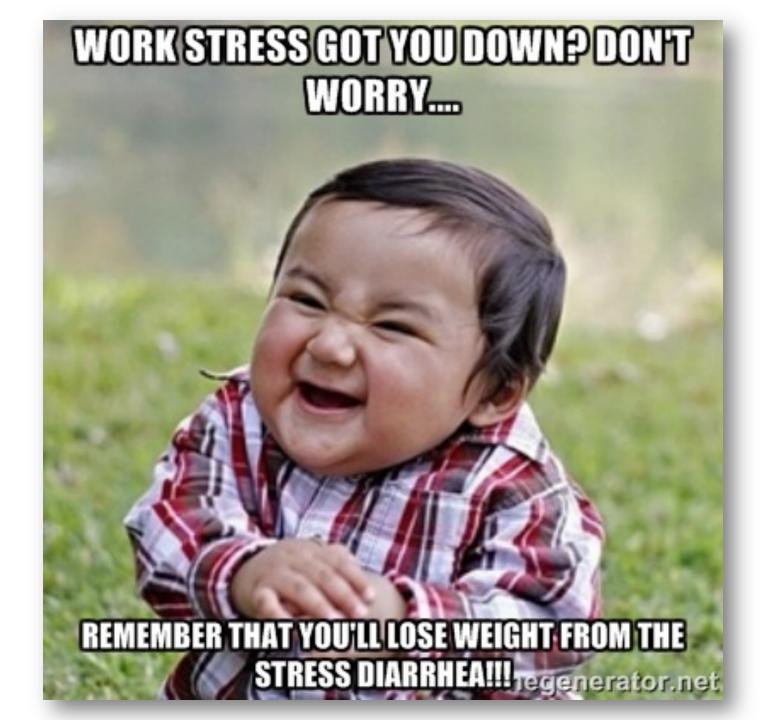
This ensures that all available energy can be used for:

- a) Running for its life
- b) Opening a can of whoop-ass



If a stressor is sufficiently alarming, an animal will promptly empty the contents of its bowels. This helps by reducing excess weight so the animal can run/fly/swim faster. Humans experience this type of stress response in the form of *chronic diarrhea* and *irritable bowel syndrome*.





I TOLD YOU I WAS SICK B. P. ROBERTS MAY 17, 1929 JUNE 18, 1979

In order to provide you with a sustained surge of energy, one of the "nonessential" functions that your body turns down is your immune system.

Over time this can lead to some generally unfavorable consequences...

Your Poor Telomeres...

- The telomeres of people who experience chronic stress are almost 45-50% shorter than typical, healthy telomeres.
- Once the telomere is gone, the DNA begins to fray and cannot be used to pass along genetic information.
- This ultimately contributes to aging and the manifestation of genetically-correlated diseases.

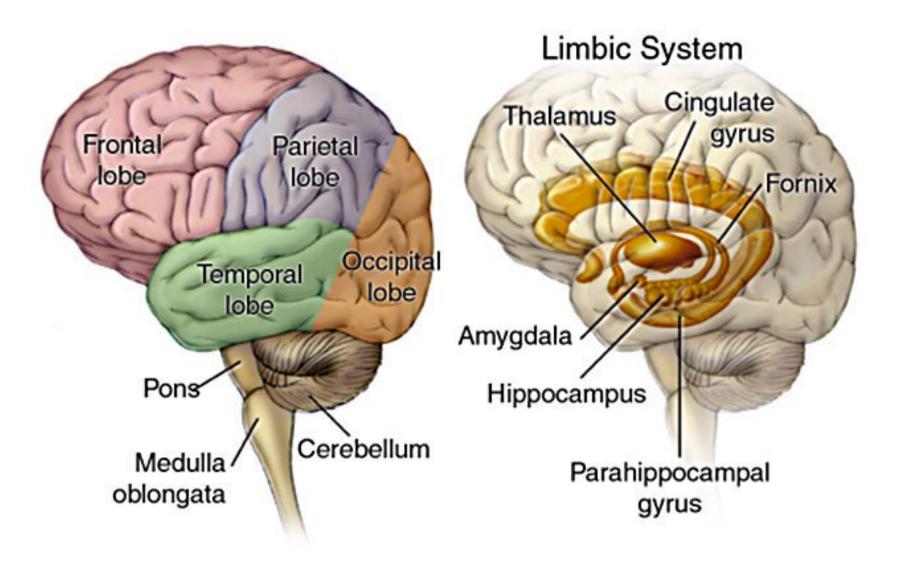


But what about my brain Dr. Wappett?

What happens to my brain when I'm stressed?



"Upper" vs. "Lower" Brain Structures

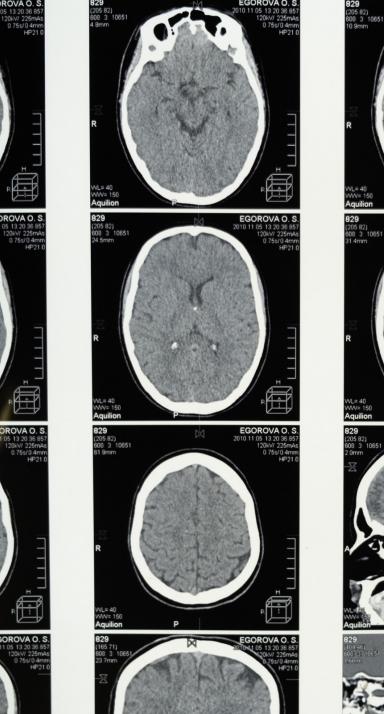


The hormones released when we are stressed temporarily rewire our brain, so we are focused on our individual survival...





Stress hormones move our thinking to the amygdala and limbic system...your lower brain...the connection to your higher brain functions is severed!





Chronic stress in children is referred to as "toxic stress" because it leads to the stress response system being permanently set to "on".

Stress hormones cause neurons to shrink & die. Children with who experience toxic stress have fewer and weaker neural connections than healthy, unstressed children!

Stress & Mental Health

- When stress becomes overwhelming and prolonged, the risks for mental health problems and medical problems increase exponentially.
- Long-term stress increases the risk of mental health problems such as anxiety, depression, substance abuse, sleep problems, chronic pain, headaches, gastrointestinal problems, a weakened immune system, difficulty conceiving, high blood pressure, cardiovascular disease, stroke, and many more!
- Unfortunately, our society has relegated mental health to an afterthought! It's something we pay attention to when we have to...until it's too late.

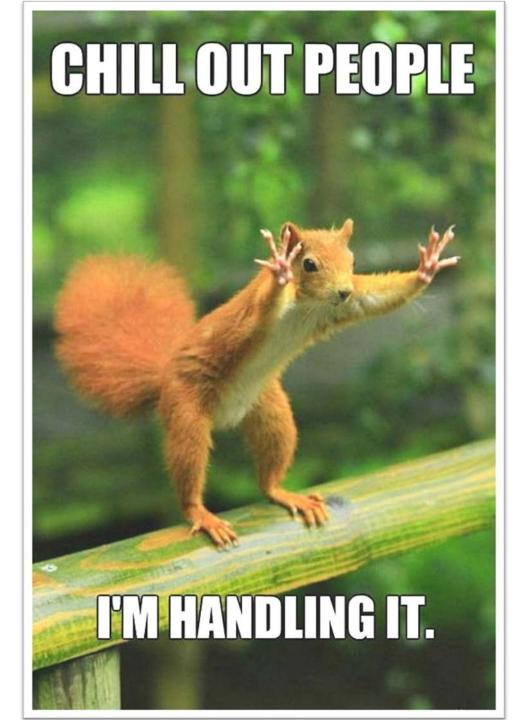


Some more facts to consider...

- 60-90% of all healthcare visits in the U.S. are related to stress-related illnesses and/or conditions!
- 80-90% of behavioral problems in schools are related to or are a response to stress.
- That means that 60-90% of all healthcare complaints can be addressed by stressreducing interventions...and 80-90% of behavioral issues in schools can be addressed by stress reduction techniques.



So, seriously...





If our bodies have a stress response AND If our bodies are subject to the laws of nature / physics THEN there must needs be an equal and opposite response....

The Relaxation Response (Benson, 1975)

Two basic steps:

The repetition of a word, sound, thought, phrase, or muscular activity. The passive return to the repetition when other thoughts intrude.

The Relaxation Response

This exercise breaks the train of everyday thought (conscious & unconscious) and allows the body to shut off it's stress response mechanisms.



What happens during the Relaxation Response?

- Heart rate decreases
- Blood pressure decreases
- Respiratory rate decreases
- Oxygen consumption decreases
- Muscle tension decreases
- Slow brain waves increase
- Lowered perception of stress
- Decrease in reactivity

So, how do some people manage stress so well?



Two basic steps:

The repetition of a word, sound, thought, phrase, or muscular activity. The passive return to the repetition when other thoughts intrude.

The Relaxation Response

This exercise breaks the train of everyday thought (conscious & unconscious) and allows the body to shut off it's stress response mechanisms.



What happens during the Relaxation Response?

- Heart rate decreases
- Blood pressure decreases
- Respiratory rate decreases
- Oxygen consumption decreases
- Muscle tension decreases
- Slow brain waves increase
- Lowered perception of stress
- Decrease in reactivity

Let's practice....

A Couple Shortcuts for your ToolBox

• The "Physiologic Sigh"

- Take a deep breath in, then take another small sip of air in...
- Then release the air to a count of 7-10.
- This practice expand alveoli in your lungs so you can absorb more oxygen and slows down your heart rate.
- Repeat as necessary

• Box Breathing

- Breath in for a count of 4
- Hold your breath on full for a count of 4
- Release your breath for a count of 4
- Hold your breath on empty for a count of 4

It doesn't take long!

When you've got one minute:

Place your hand just beneath your navel so you can feel the gentle rise and fall of your belly as you breathe. Breathe in. Pause for a count of three. Breathe out. Pause for a count of three. Or quietly repeat to yourself "I am" as you breathe in and "at peace" as you breathe out. Repeat slowly two or three times. Then feel your entire body relax into the support of your chair.

When you've got two minutes:

Count down slowly from 10 to 0. With each number, take one complete breath, inhaling and exhaling. For example, breathe in deeply, saying "10" to yourself. Breathe out slowly. On your next breath, say "nine", and so on. If you feel lightheaded, count down more slowly to space your breaths further apart. When you reach zero, you should feel more relaxed. If not, go through the exercise again.

When you've got three minutes:

While sitting, take a break from whatever you're doing and check your body for tension. Relax your facial muscles and allow your jaw to open slightly. Let your shoulders drop. Let your arms fall to your sides. Allow your hands to loosen so there are spaces between your fingers. Uncross your legs or ankles. Feel your thighs sink into your chair, letting your legs fall comfortably apart. Feel your shins and calves become heavier and your feet grow roots into the floor. Now breathe in slowly and breathe out slowly.





Pathways to Peace...

- The Relaxation Response as a meditative or "sitting" practice uses a mind→body pathway to induce relaxation.
- Exercise, yoga, and laughter uses a body→mind pathway to induce relaxation.
- It works both ways...

A healthy mind leads to a healthy body and a healthy body leads to a healthy mind.

They are inextricably intertwined, and one affects the other!

"Every pot of clay needs to pass through fire to get strong. And man's just another pot of clay." **~Anurag Das**

Questions?

Thank You!

wappett@usu.edu

www.matthewwappett.com