Understanding and Managing Stress

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What could cause you stress? What are your stressors?



Stress

Stringo (Latin) to put pressure





Stress is a **Health Epidemic** of the 21st Century





Stressed Situation





Stress Hormone

https://youtu.be/-bAZ2dsdkVE 2023.5.24



Phase 1: Adrenaline Phase 2: Cortisol



Fight or Flight

Zoo. Jeff Pinkner. Josh Appelbaum, Scott Rosenberg, Andre Nemec. CBS, 2015-2017.

Body Response

- Increases heart rate
- Increases blood pressure
- Increases respiration
- Inhibits digestion
- Suppresses the immune system
- Suppresses sexual arousal



Mental Response

- Increases sensory perception (=Hyperarousal)
- Causes insomnia



https://www.bbc.com/news/news beat-46223386 2023.5.24



Primitive Stress



Modern Stress

https://youtu.be/bkk_U9qpi9w 2023.5.24

Same Stress Response





Adnan, Adnan. (2021). Investigation of Mathematics Anxiety in Undergraduate Engineering Students.



eustress







Dealing with Excessive Amount of Stress







Divide Your Work



Prioritize Your Work

https://blog.rescuetime.com/how-to-prioritize/ 2023.5.25

Unfortunately... living in modern society, we cannot avoid being stressed.

How can we understand and manage the negative effects of stress?

Negative Cycles of Stress



Stress Cycle of Negative thoughts



Stress Cycle of Anxiety & Insomnia



Stress Cycle of Lacking Support



Stress Cycle of Negative thoughts





You passed by a friend and said "Hi!". Your friend did not reply.

Negative Cognition

- I was ignored
- She doesn't like me
- I may have done something bad and she is angry
- What a misbehavior of her!
- I feel sad and lonely



Alternative Cognition

- She couldn't catch my voice
- She might have been wearing an earphone
- She was busy on her way







One Situation, Multiple Perceptions

https://www.drjimtaylor.com/4.0/change-your-perceptions-to-become-a-more-successful-athlete-and-person/ 2023.5.30 https://www.drjimtaylor.com/4.0/change-your-perceptions-to-become-a-more-successful-athlete-and-person/ 2023.5.30

Tendencies to Negative Cognition Perfectionism



https://www.verywellmind.com/signs-you-may-be-a-perfectionist-3145233 2023.5.30

Tendencies to Negative Cognition "should, have to, must"

- Creates a sense of guilt and become frustrated to yourself
- Creates anger and frustration to others

Change "should, have to, must" to "want to" or "can"

"I should speak better Japanese" → "I want to speak better Japanese" → "I can speak good Japanese!"



Tendencies to Negative Cognition Overgeneralization

• Tends to phrase things as "always", "everyone", "never" or "definitely"

I always mess up in an important situation. Everyone thinks stupid of me. I will never succeed.

Concretize your experience in past sense.

I messed up in an important situation before. My brother thought I am stupid. I once failed before.

Overcoming negative tendencies

1. Identify Your Thinking Patterns

Recognize yourself thinking negatively Take records of your thoughts

2. Challenge Yourself

Is this negative thought true? Would someone else think the same? Do you have enough evidence to think this way?

3. Replace Your Thoughts

Speak to yourself positively "I'm ready to give a great presentation."

Stress Cycle of Anxiety & Insomnia





Anxiety

Anticipation of a <u>future</u> concern



Enable us to prepare for future concerns



Cause unpleasant physical symptoms
Lead to avoidant behavior



Tame your anxiety

Not only a troublesome feeling

A fundamental and helpful emotion for survival

"Prepare or else you will encounter danger"

Don't instantly try to remove your anxiety

Tame your anxiety Alter it to motivation

https://store.shopping.yahoo.co.jp/moriyama-print/dpos-101.html 2023.5.30


Tips to tame your anxiety

Realize that anxiety is a fundamental/helpful emotion

Anxiety leads us to have a narrow "spot-like" perception

Re-evaluate your situation Try to obtain a broader perception

(Also challenge your negative tendencies if you have any)

Stress Cycle of Anxiety & Insomnia



From my point of view as a psychiatrist, having a good and stable sleep is extremely important to maintain your brain function

Basics on sleeping



https://www.hotoku.or.jp/support/

Sleep has certain depths

https://www.flickr.com/photos/jay hem/1045709386 2023.6.1

Image of Sleep Cycle



Quoted from the Kanazawa Medical School University Web Site (Altered)

REM sleep (shallow sleep)

Non-REM sleep (deep sleep)

90 minutes cycle





seen right after sleep onset becomes shallower after each cycle the brain activity decreases the body slightly rests (during this period you roll over)

Growth hormone is secreted during non-REM sleep

https://www.babydestination.com/acid-reflux-causes-symptoms-home-remedies-babies 2023.6.1



Lacking sleep damages our skin Growth hormone repairs various tissues

REM-sleep -bodily rest-



Rapid Eye Movement the brain is active you see dreams body muscle is loosening old hag syndrome can occur

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> REM sleep enhances memory function

Image of Sleep Cycle



Quoted from the Kanazawa Medical School University Web Site (Altered)

Inner Body Clock





All the 60 trillion cells in our human body has a biological clock

The image is removed due to the copyrights. [**L'Heure de tous in France]**







Biological clock in each cell

Nerve center of the body clock

suprachiasmatic nucleus

The nucleus that is above the optic nerve intersection





The body clock nerve center has a relation with visual perception

The time repair mechanism is dependent to morning sunlight



Tips for good sleep

Regular meals Avoid eating large meals late at night

Regular exercise Aerobic exercise in the evening is the best

Be exposed to sunlight for at least 30min after you wake up



Darker and warmer lighting at night

https://www.motom-jp.com/2020/10/27/ホテル風の照明計画とは?おしゃれなお部屋は照/ 2023.7.10

Don't try to sleep early, just try to wake up early Don't stick to a certain sleeping time Don't keep yourself awake in bed Simply go to bed when you are sleepy

Bed or futon should only be used for sleeping and sexual activities

Avoid taking stimulants at night

4 hours

1 hour





Alcohol makes you sleepless

It could help you fall asleep (knocking yourself down) but the quality of sleep worsens

Stress Cycle of Lacking Support



What are the characteristics of people with addiction?



Difficulty relying on people

https://es.aleteia.org/2021/09/21/salvate-no-sigas-ofendiendo-a-dios/ 2023.7.10

How addiction develops

Having problems Difficulty relying on people Trying to handle things by themselves Cannot handle the problem by themselves Difficulty increases Start relying on substances/gambling etc.

What does being independent mean?

Handling things by yourself?

Relying on only one single person/substance...?



Being independent means "having social skills to rely on many people/things properly"

Stress Cycle of Lacking Support



Rely on people you can trust

http://sakainaoki.blogspot.com/2012/01/blog-post_19.html 2023.7.10

Positively, share your difficulties with your friends and families



Stressed spelled backwards is



- LORETTA LAROCHE

