

PhDr. Pavel Humpoliček Ph.D. humpolicek@med.muni.cz 549 49 3735 / 775 779 339 www.muni.cz/lide/11191



Psychological counselling & therapy Lipnická 1135 / Kounicova 61 Bystřice pod Hostýnem / Brno www.p-s-y-c-h-o-l-o-g.cz



#### Psychology of Mental Health and Well-being Work/Study-Life Balance & Stress Management (MUNI: aVLLP7X1 & aVLMH011) by Pavel Humpolíček

# Lesson 1

# **Topic:**

Basal information about the stress, **<u>nature & physiology of the stress</u>** and the influence to our everyday life.

Suggestions: Watching some short videos and thinking about the mentioned information.

## **Recommended videos:**

Stress Response in Animation (1:07; Healthhour) http://www.youtube.com/watch?v=BIfK0L8xDP0

2-Minute Neuroscience: HPA Axis (1:55; Neuroscientifically Challenged) https://youtu.be/QAeBKRaNri0

TED-Ed: Lessons Worth Sharing

How stress affects your body (4:28; Sharon Horesh Bergquist) https://www.ted.com/talks/sharon\_horesh\_bergquist\_how\_stress\_affects\_your\_body

How stress affects your brain (4:01; Madhumita Murgia) https://www.ted.com/talks/madhumita\_murgia\_how\_stress\_affects\_your\_brain

The surprising link between stress and memory (4:47; Elizabeth Cox) <u>https://www.ted.com/talks/elizabeth\_cox\_the\_surprising\_link\_between\_stress\_and\_memory</u>

### Short conclusion:

The stress is very **immanent and natural** part of the life. Hope, you find the way, **how to utilize or** (at least 'at times') **enjoy the stress** :0)

# Summary of the most important principles:

### NATURE of the stress

Stress is anytime & anywhere (e.g. because of gravity) Stress works for us; Stress is functional; would motivate us to be efficient (e.g. eu-stress) We're able to **influence the duration & intensity**, not the start-point of the stress reaction. **Don't worry about stress ...** 

... anyway ... it's anytime & anywhere ...

# **PHYSIOLOGY** of the stresss

Stress response is **very fast** ... therefore we're able to influence only the duration & intensity

Body&Mind response to the stress is unpredictable and chaotic

- ... therefore it's supportive in the really dangerous (life-threatening) situations
- ... therefore we behave so "strange", when we're looking for the "lost keys" (under the time pressure)

Stress response is super wasteful because it requires lots of energy

- ... because it prepares the whole body to the very fast and life-keeping reaction
- ... therefore we would experience a "cold sweating"

We are able to be aware (know about, feel or experience) the stress response (e.g. acute & hyper), but more dangerous is the **unconscious** one (e.g. chronic & hypo). Would be motivational/motivating (**eustress**) or (at least partly) healthy; or distractive and disturbing (distressing).

STRESS is healthy or dangerous	Conscious Mind: 10 % 1. analyses 2. thinks & plans 3. short term memory Contribution
out of control (not only when)	Subconscious Mind: 90 % 1. long-term memory 2. emotions & feelings 3. habits, relationship patterns, addictions
it s unconscious (!	4. involuntary body functions 5. creativity 6. developmental stages 7. spiritual connection 8. intuition
is fast	
but sometimes has a long stamina	General Adaptation Syndrome PHASE 1 PHASE 2 COMPENSATION Adaptive Reports Compensation Phase Compensation Phase Compensa
is nasteful	Unset Shock
E chaotic	

If you want to know more you would continue to these links:

GAS – General adaptation syndrome – Hans Selye https://en.wikipedia.org/wiki/Stress\_(biology)

#### Homeostasis vs. Allostasis

http://mcb.berkeley.edu/courses/mcb135k/lecture32-Homestasisallostasis.pdf https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2815096 https://www.ted.com/talks/moshe\_szyf\_how\_early\_life\_experience\_is\_written\_into\_dna

**Neuroplasticity** – principle: **Use it or lose it!** <u>https://lurl.cz/@neuroplasticity</u> <u>https://www.ted.com/speakers/vilayanur\_ramachandran</u>