



Stress: We all know what it is, but what is it?

Stress Response Triad ~
Systems Involved:

Nervous
Immune
Endocrine

Psychoneuroimmunology

Classifications & Responses

A. Responses - *Acute*

SNS & Adrenal hormones released:

Norepinephrine + epinephrine → BP + HR + Respiration + MM tension
GI activity + alertness
Cortisol → metabolic rate + immune response

B. Responses - *Chronic*

Chronic responses negatively affect systems:

Physiologic
Psychological → Feedback loops →
Cognitive
Behavioural

Modifiable via: +ve e.g. exercise, social support
- ve e.g. substance abuse, isolation

Maladaptive Responses

PTSD

- Chronic headaches
- Back pain
- GI distress
- Comparable to rapid aging

- × Mantra
- × Mindfulness
- × Qigong
- × Yoga

Self-Hypnosis & meditation

Restricting our discussion

Brief Background information for those that did not attend previous sessions.....

Definition of hypnosis by Prof. Peter Sacco:

” Hypnosis is tunnel vision for a greater sense of awareness.”

Neuroanatomy of Hypnosis

Hypnosis: Mind-Body

Verified Evidence Based Effects:

Allergic skin reactions	+
Pain	+
Blood biochemistry	+/-
Immune modulation	+/-
Wound healing	+/-
Blood Pressure	+/-
Breast enlargement	+
Visual acuity	+/-
Urinary system	+
IBS	+
Asthma & respiratory system	+

Hypnosis

- Classical
- Ericksonian
- Self- Hypnosis
- Hetero - Hypnosis
- Passive; Passive-Alert; Active-Alert

Meditation

Meditation defined: Latin *meditari*: to concentrate.

Meditation is a series of mental disciplines used to induce specific modes or states of consciousness, for specific or non-specific aims, in a cultural and or religious context.

Neuroanatomy of Meditation

- eight brain regions were found to be consistently altered:
- including areas key to meta-awareness (frontopolar cortex/Brodmann area 10),
- exteroceptive and interoceptive body awareness (sensory cortex and insular cortex),
- memory consolidation and reconsolidation (hippocampus),
- self and emotion regulation (anterior cingulate cortex and orbitofrontal cortex), and intra- and interhemispheric communication (superior longitudinal fasciculus; corpus callosum)

*Fox et.al. Neuroscience & Biobehavioral Reviews*43: 48–73

Traditions

<u>Eastern:</u>	<u>Western:</u>	<u>Secular:</u>
Yoga, Buddhist, Taoist, Zen	Christian, Jewish, Muslim	Mindfulness

References

Barabasz, Arreed F. et.al. (eds.) (2010) *Medical Hypnosis Primer Clinical and Research Evidence*. NY,NY.: Routledge Taylor & Francis Group.

Doc Childre. (1994) *One-minute stress management freeze-frame*. Bolder Creek, CA: Planetary Publications.
www.heartmath.org

Frantzis, Bruce. (2009) *Tao of Letting Go meditation for modern living*. Berkley, CA.: Blue Snake Books.

Goleman, Daniel (1988) *The Meditative Mind*. Los Angeles, CA.: Jeremy P. Tarcher, Inc.

Lehrer, Paul M., Robert L. Woolfolk, Wesley E. Sime (2007) *Principles and Practice of Stress Management 3ed*. N Y: The Guilford Press.

Nash, Michael R. and Amanda J. Barnier (eds.) (2008) *The Oxford Handbook of Hypnosis*. Oxford: Oxford University Press.

Simpkins, C. Alexander and Annellen M. Simpkins (1996) *Principles of Meditation Eastern Wisdom for the Western Mind*. Boston: Tuttle Publishing.

Smith, Jonathan C. (2005) *Relaxation, Meditation, & Mindfulness*. NY: Springer Publishing Company.

<http://collegehealthandwellness.wordpress.com/2009/12/19/ways-to-manage-your-stress/>

<http://www.stressfree.com/stressmodel.php>

<http://www.meditationsociety.com/home.html>