

R 902 Meditation  
OLLI, Winter Term 2015  
Session II

Agenda:

1. Physical Effects
2. Research with Links
  - a. Huffington Post
  - b. NIH
  - c. Web MD
  - d. Scripps
  - e. Institute of Noetic Sciences
  - f. Research Gate
3. Guided Meditation

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please do not call after 9 pm, especially if you want an intelligent response!

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Notes

## Physical Effects

there are two lists:

first is summary of findings and where to see more information about a finding

second is the list of resources and what they cover

use list of resources if you want to find out more about study

Huffington Post chart

a drawing about all the positive changes associated with meditation

note comments on research done

blood pressure goes down

what body does during meditation:

relaxes and the blood vessels relax too

easier for the heart to pump blood

then blood pressure goes down

Huffington Post, article and chart

NIH, five separate research reports funded by TM

WebMD, lowers blood pressure

improves management of chronic illnesses (congestive heart failure, insulin management)

NIH, one research project funded by TM

reduces metabolism

WebMD

heart rate slows

WebMD

helps ward off illnesses and infection

WebMD

Huffington Post chart, immune system

improves some women's health issues: PMS, infertility, breast feeding, hot flashes

WebMD

assists with management of pain symptoms

Huffington Post article

Huffington Post chart

reduces stress hormone levels

Huffington Post article

as reduce stress hormones, get a better “relaxation”  
get all the varied benefits of meditation

enhances longevity

NIH, one research report funded by TM

Huffington Post chart, prefrontal cortex

less decline/thinning of prefrontal cortex

reduces and assists with atherosclerosis (hardening of the arteries)

NIH, two research reports funded by TM

changes brain structure

brain becomes more effective

Huffington Post article

Huffington Post chart

hippocampus, area sensitive to stress, shrinks with stress

increases brain structure with meditation

increases gray matter in posterior cingulate cortex

associated with mind wandering/creativity

increases gray matter in temporo-parietal junction

associated with processing emotions in others effectively

WebMD, improves brain waves

changes activity in amygdala

Huffington Post chart

is active as work negative emotions, like stress (with stress more dense)

meditation decreases activity

NOTE:

meditation is NOT hypnosis

in hypnosis you allow someone else to direct your movements

with meditation, you remain in charge of yourself and your actions

## Research with Links

lots of articles

think carefully about sources in your reading  
some info may be copyrighted—did not always put quotes

some sites displayed as links, some did not

for documents in DocStore

if blue and underlined, can click on the link

if not underlined, select the whole link, copy it and paste it in your browser

Huffington Post (4/30/13, are more recent updates)

reduces blood pressure

reduces pain response

reduces stress hormone levels

increases structure of brain in areas stimulated

this site has a really good (but complex) schematic of the benefits of meditation

Link: [http://www.huffingtonpost.com/2013/04/30/meditation-health-benefits\\_n\\_3178731.html](http://www.huffingtonpost.com/2013/04/30/meditation-health-benefits_n_3178731.html)

or search (Google): huffington post meditation health benefits

NIH, Transcendental Meditation, Funded Scientific Research on TM

Reduced blood pressure (December 2007)

Improved quality of life for Congestive Heart Failure Patients (March 2007)

Reduced Metabolic Syndrome (June 2006) - relates to blood pressure and insulin resistance

Enhanced Longevity (May 2005)

Reduced Blood Pressure and Use of Hypertensive Medication (January 2005)

Reduced Blood Pressure in At Risk Teens (April 2004)

Reduce Atherosclerosis (April 2002)

Regression of Atherosclerosis (March 2000)

Relaxation of Blood Vessels (July 1999 and January 1999)

Reduced Blood Pressure (November 1995 and August 1996)

Link: <http://www.tm.org/national-institutes-of-health>

Web MD (March 1, 2006)

any condition caused/worsened by stress can be helped by meditation  
helps decrease metabolism  
lowers blood pressure  
improves heart rate, breathing, brain waves  
brain scans show increased in activity for control of metabolism and heart rate  
Buddhist monks showed long lasting changes in the brain in good ways re:  
    attention  
    working memory  
    learning  
    conscious perception  
Heart Health: lowers blood pressure  
Immune Booster: wards off illness and infections  
Women's Health: improves PMS, infertility problems, breast feeding, hot flashes

Link: <http://www.webmd.com/balance/features/transcendental-meditation>

### Scripps

news release (November 12, 2013)  
    research study on heart health and cardiovascular system  
    teamed with Copra Foundation  
    expect results to be posted "next year"  
status

### Institute of Noetic Sciences

Introduction to The Physical and Psychological Effects of Meditation (June 1997)  
can download introduction  
erudite and old  
an excellent review of background of meditation types and research

Link: <http://www.noetic.org/library/publication-books/physical-and-psychological-effects-meditation/>

also search (Google): meditation institute of noetic sciences  
    comprehensive list  
    see the up-to-date Bibliography that is mentioned there

## Research Gate

online tool to find out what is going on in current research

someone asks question

gets responses on current studies

sometimes are comments on issues or problems

some interesting research re meditation includes

mindfulness and insomnia

positive residual effects

genetics

cerebral blood flow during chanting meditation

meditation & cognitive function/cerebral blood flow in subjects with

memory loss

cerebral blood flow in meditators vs non meditators

etc.

Link: [http://www.researchgate.net/post/What\\_are\\_the\\_effects\\_of\\_Meditation\\_on\\_Brain](http://www.researchgate.net/post/What_are_the_effects_of_Meditation_on_Brain)

## Guided Meditation

reminder that if you do not want to do this one or find it frustrating, can do another

I will ask you to relax and breathe

Colors:

go in the order of the colors of the rainbow: ROY G BIV

how do you feel about the color

do you like it?

try to find a place or an image where it pleases you to see that color

clothing, flowers, yard, art, nature

enjoy that image

If you look at a beam of light that goes through a prism, it enters the prism as white but it goes out the other side as a range of colors

Red

Orange

Yellow

Green

Blue

Indigo, really dark blue

Violet

remember that the prism separated the colors so we could see them individually

now allow them to go back together and become white again

just look at the light going into the prism and you will see it clearly as white

then very slowly back to this room

gently wiggle your fingers and your toes

shift your legs slightly

move your hands

open your eyes when you are ready