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centre for
positive psychology
and health

The Science of Health and Happiness

NOTES: LECTURE 6 – MEDITATION FOR HEALTH

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MARCH 2021

The Science of Health and Happiness
March 2021

Meditation – myths & facts

Meditation is all in your head



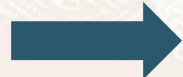
Meditation practice integrates the mind and the body; it can have positive impacts on both

Meditation is all about stopping your thoughts and wiping your mind



It is not possible to completely stop your thinking process

You need a meditation stool, bell, series of books, apps, candles and cushions to meditate



All you need to practice meditation is your head and your breath

You need to practice hours a day to receive any benefit from meditation practice



Our research* shows that positive effects can be observed after only 5 minutes of practice, twice daily for 4 weeks

Meditation is a Buddhist practice that has no real place for those of other religions or atheists



Meditation practice is thousands of years old and has been practiced by members of all global religions, including Christians; you don't have to be religious to gain the benefits

Proven health benefits of meditation?

More quality research is needed but significant trends are emerging

Enhanced immune function and balanced inflammatory responses

Black, D. S., & Slavich, G. M. (2016). Mindfulness meditation and the immune system: a systematic review of randomized controlled trials. *Annals of the New York Academy of Sciences*, 1373(1), 13–24. <https://doi.org/10.1111/nyas.12998>

Epigenetic changes of disease modifying genes

Kaliman P. Epigenetics and meditation. *Curr Opin Psychol*. 2019;28:76–80.

Improved heart health

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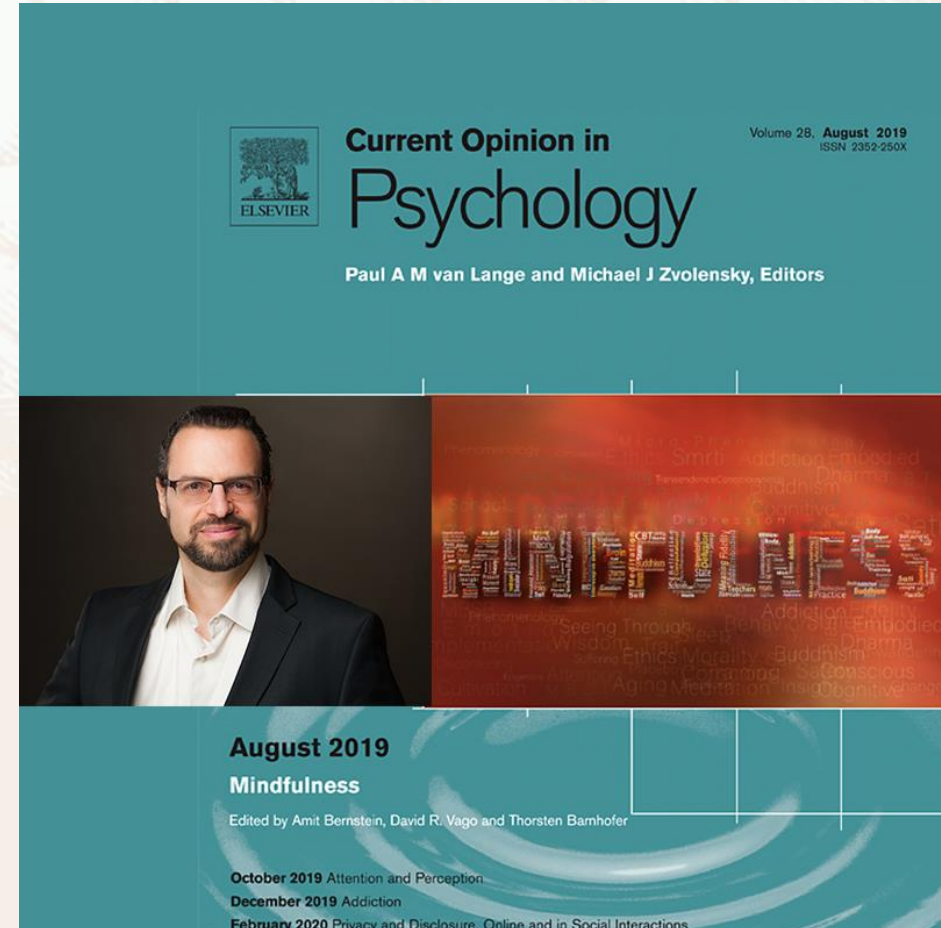
Better sleep

Black DS, O'Reilly GA, Olmstead R, Breen EC, Irwin MR. Mindfulness Meditation and Improvement in Sleep Quality and Daytime Impairment Among Older Adults With Sleep Disturbances: A Randomized Clinical Trial. *JAMA Intern Med*. 2015;175(4):494–501.

Better Psychological health

Keng SL, Smoski MJ, Robins CJ. Effects of mindfulness on psychological health: a review of empirical studies. *Clin Psychol Rev*. 2011;31(6):1041–1056.

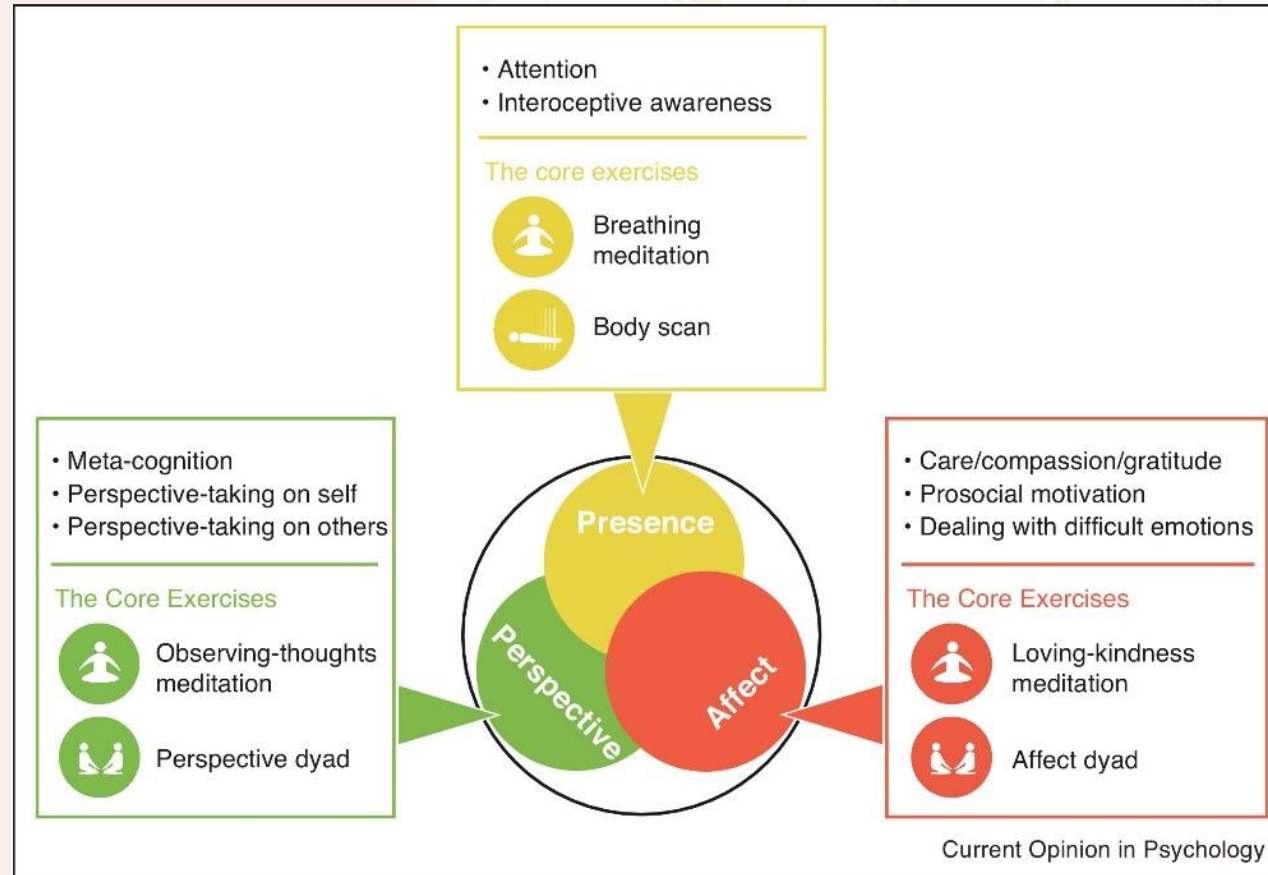
Recent Scientific Reviews



Not all meditations are the same

Attention-based Training (ABT) Mantra meditation

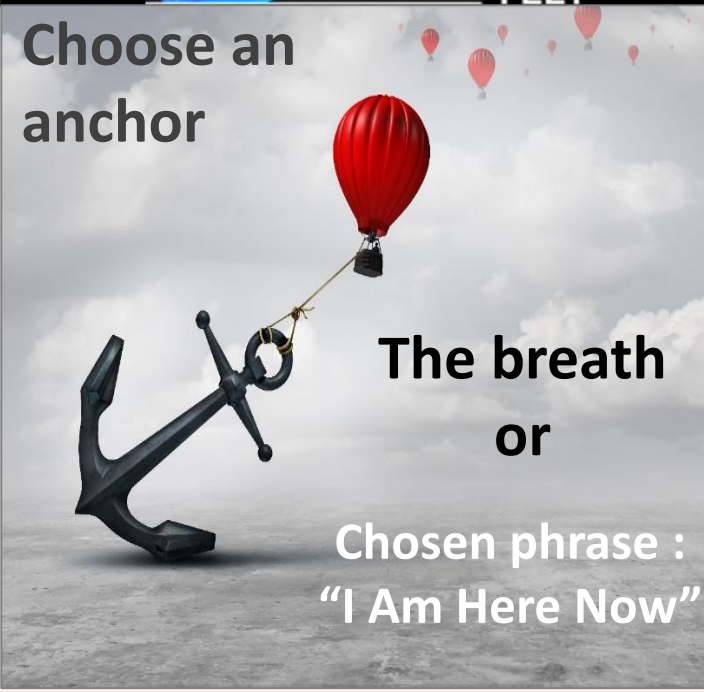
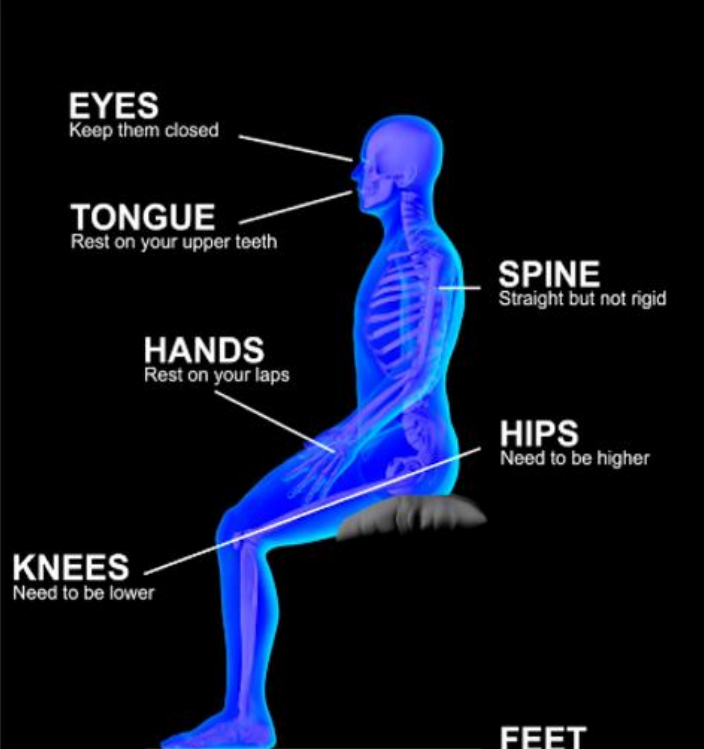
(Develop present-moment awareness, focus and integrated awareness between mind and body)



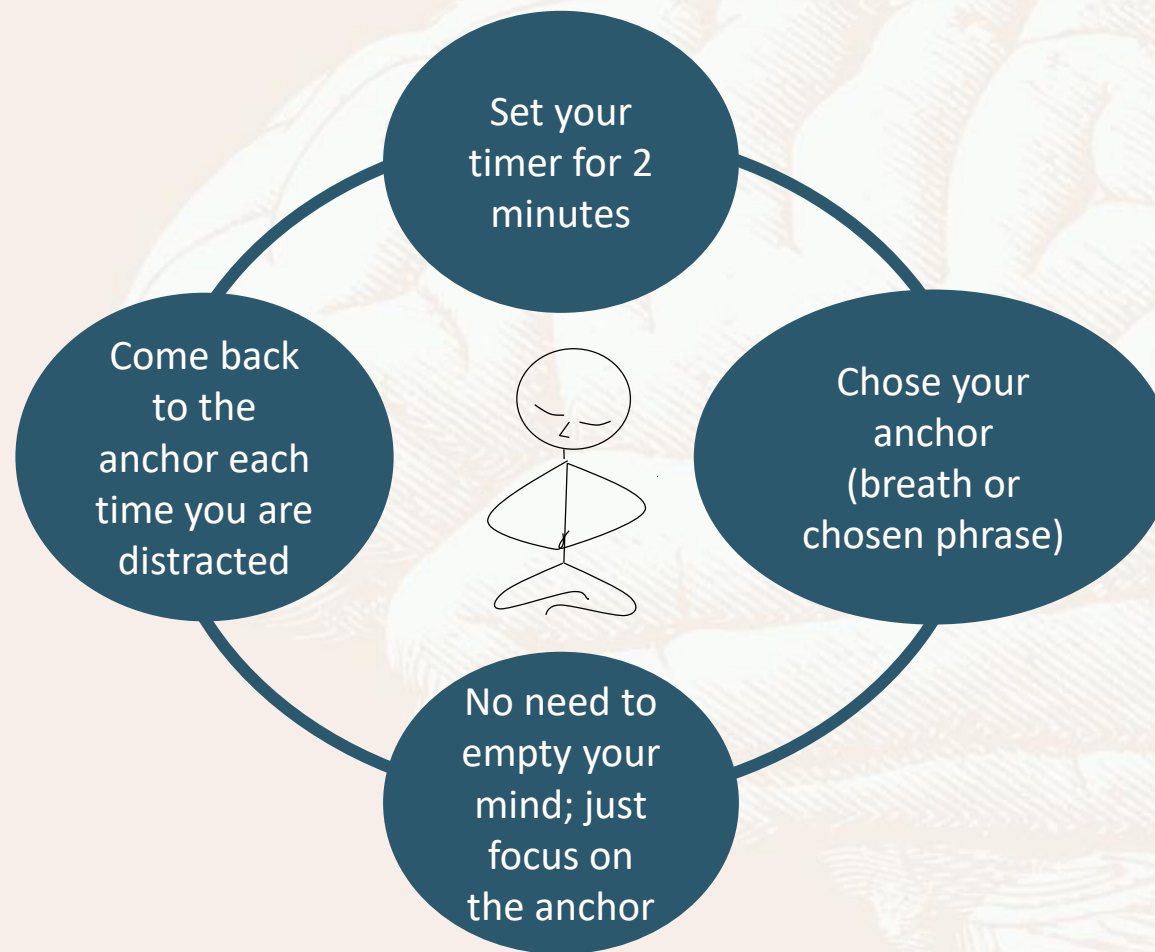
Mindfulness meditation
(Metacognition; develop perspective of self and other)

**Loving-kindness meditation;
Gratitude-based meditation**

(Develop compassion for self and other)



How to practice



Attention-based Training (ABT)

- Disengage from thought, emotions, sensations & memories by simply returning to your anchor, on a moment by moment basis

The body scan meditation

A member of the concentration, presence, attention, focus style of meditation that places emphasis on areas of the body while breathing normally.

Benefits

- Helps calm the body during anxiety, stress, pain, frustration and discomfort
- Prepares the mind and body for meditation
- Useful for insomnia

Click here to practice the body scan for free:
www.youtube.com/watch?v=XSw-WLmooWg&t=4s



Homework for the week

Practice the basic practice daily

- 2 minutes in the morning and evening

- Same place
- Same position
- Same time

Remember –

- It takes an average of 66 days to generate a new habit*
- There is no such thing as a good or bad practice – just practice
- It doesn't matter how distracted your are – in the gym, you wont build muscle by lifting feathers
- Meditation practice of any kind isn't easy; it takes time, commitment and practice

Suggested 8-week practice plan

8-week ABT practice plan		
Week	Morning minutes	Evening minutes
1	2	2
2	3	3
3	4	4
4	5	5
5	6	6
6	8	8
7	9	9
8	10	10

Links to our free meditations

Here is the link for a free 8-week Attention-based Training (ABT) we generated for staff and RCSI hospital group at the start of the pandemic:

<https://www.youtube.com/playlist?list=PLmcXs1oNVn8mZOWQi6RQXPYDBnP6D13lF>

Links to our short meditations:

[Centre for Positive Psychology & Health – short meditations](#)

Summary (I)



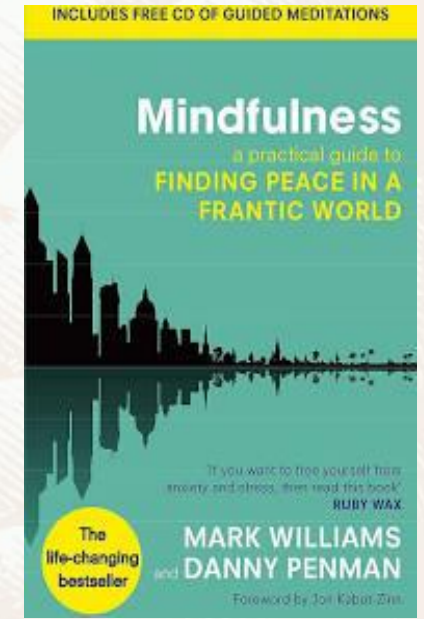
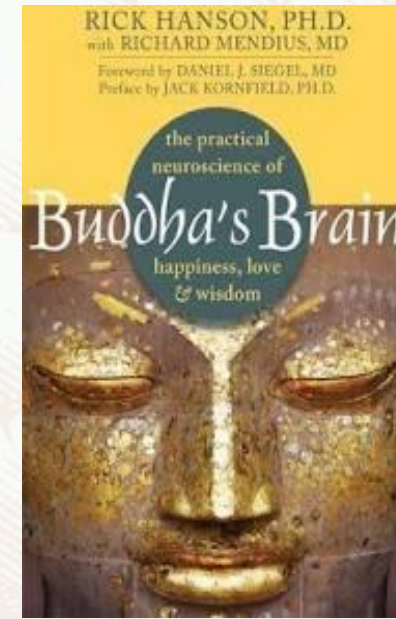
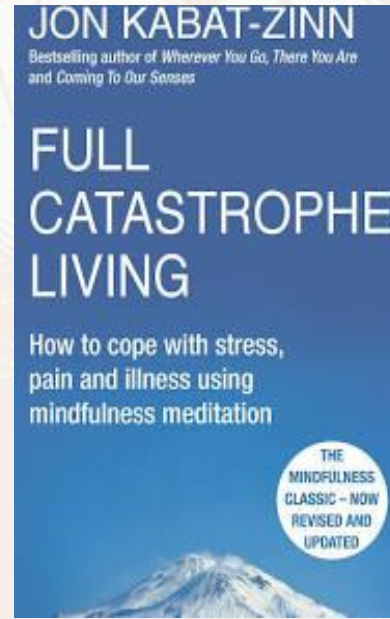
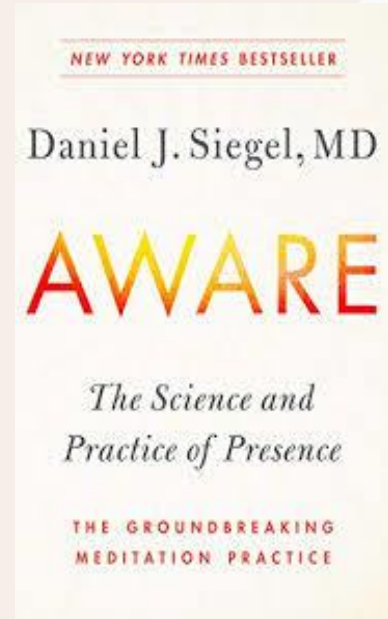
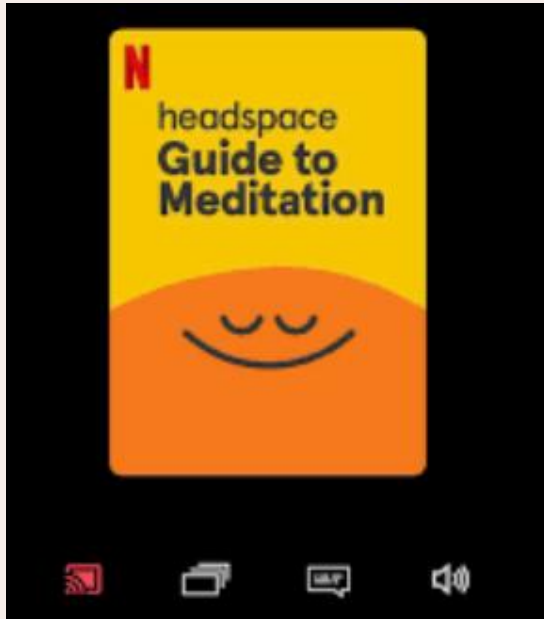
- There are many misconceptions about meditation practice, not least the fact that meditation is not about stopping your thinking processes
- There has been an exponential growth in the number of meditation-based research articles published since 2000; not all of these studies are well designed or powered – more research is needed
- Not all meditation practices are the same; broadly, three types of meditations have been described: (1) **meta-cognitive approaches** like Mindfulness, which develop awareness of internal and external environments; (2) **focused, concentration-based meditation** practices like ABT, mantra meditation and Zen sitting meditation, which transcend the cognitive processes and develop greater focus and thought control; (3) **compassion-based meditations** like loving-kindness meditation and gratitude-based practices that develop emotional regulation and compassion for self and others

Summary (II)



- Attention-based Training (ABT; second type of meditation practice based on mantra meditation) involves using an anchor (the breath or a chosen phrase/mantra) to help you disengage from thoughts, memories, emotions and sensations on a moment by moment basis
- The central ABT practice can help to restore cognitive control by balancing heart rate variability, the autonomic nervous system and regulating heart rhythm
- Practice the Body Scan meditation *prior to* the central ABT practice when feeling agitated or in discomfort
- Regular practice is required for lasting benefits – start with 2 minutes, morning and evening

Recommended viewing & reading



Scientific papers

Enhanced immune function and balanced inflammatory responses

Black, D. S., & Slavich, G. M. (2016). Mindfulness meditation and the immune system: a systematic review of randomized controlled trials. *Annals of the New York Academy of Sciences*, 1373(1), 13–24. <https://doi.org/10.1111/nyas.12998>

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Scientific papers

Be a better you. Scientific American Mind (special edition) March 2018; volume 27, issue 1s

Mindfulness. Edited by Amit Bernstein, David R. Vago, Thorsten Barnhofer. Current Opinion in Psychology. Volume 28, Pages 1–326 (August 2019)

Singer & Engert. It matters what you practice: differential training effects on subjective experience, behaviour, brain and body on the *Resource Project*. Current Opinion in Psychology. Volume 28 (August 2019); Pages 151–158.

Sofie L. Valk et al. Structural plasticity of the social brain: Differential change after socio-affective and cognitive mental training. Science Advances – 2017;3:e1700489

Dunne et al. *Burnout in the Emergency Department: Randomised Controlled Trial of an Attention-based Training Programme.* Journal of Integrative Medicine. 17 (2019) 173–180.

Lynch, et al. *Mantra Meditation in the Emergency Department: A Qualitative Evaluation.* British Medical Journal Open. 2018; 8: e020685

Lynch, et al. Impact of mantra meditation on health and wellbeing: A systematic review protocol. *European Journal of Integrative Medicine* 18 (2018) 30–33

Farver-Vestergaard et al. Mindfulness-based cognitive therapy in COPD: a cluster randomised controlled trial. *Eur Respir J* 2018; 51: 1702082

Websites

<https://www.resource-project.org/en/>

<https://www.ucl.ac.uk/news/2009/aug/how-long-does-it-take-form-habit>

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rcsi.com/happinessresources

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