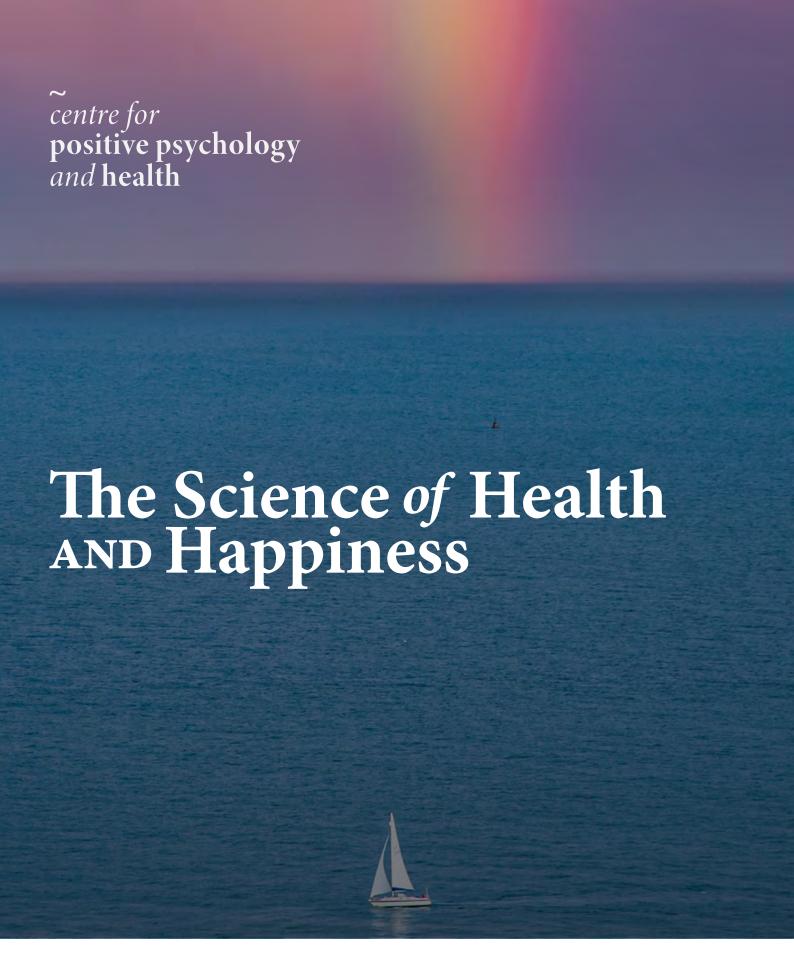




centre for positive psychology and health

The Science of Health and Happiness



LECTURE 1

Professor Ciaran O'Boyle

positive psychology RCSI Science of Health and Happiness: NOTES LECTURE 1

- WHO definition of health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' https://www.who.int/about/who-we-are/frequently-asked-questions
- 20th/21st century: modernisation and rapid rise chronic diseases associated with lifestyle: (decreasing activity, obesity, high processed diet, smoking and alcohol)
- Five conditions diabetes, cardiovascular diseases, cancer, chronic respiratory diseases and mental health disorders account for an estimated 86% of the deaths and 77% of the disease burden in the European Region. https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases
- The biomedical model: body seen as machine limited view alternative: bio-psycho-social model
- New discoveries: gut-brain interactions, low grade inflammation (metaflammation)
- Lifestyle Medicine focuses on educating and motivating people to change their personal habits and behaviors in relation to nutrition, physical activity, sleep, managing stress, avoiding risky substances and building and maintaining positive social relationships.
- **Mental health:** a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. https://www.who.int/features/factfiles/mental_health/en



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- **Positive Psychology** is the scientific study of optimal human functioning that aims to discover and promote the factors that allow individuals and communities to thrive
- **Hedonic tradition**: pleasures; happiness here seen as the good life in terms of seeking pleasure and avoiding pain
- Eudaimonic tradition: gratifications; happiness seen as achieving one's full potential; the pursuit of virtue and meaning
- The **pleasant life** is devoted to the pursuit of positive emotions (hedonic well-being)
- The **good life** involves using ones dominant characteristics to to engage fully in things to create a state of *flow*
- The meaningful life is about using your strengths in the service of something greater than yourself
- Temperament: 50% genetic; 10% circumstances; 40% under our own control
- The PERMA Model of Happiness. Positive Emotions; Engagement; Relationships; Meaning; Accomplishment.
- Increasing PERMA: *Positive Emotions:* The 3 good things exercise; *Engagement:* Learning to use your best strengths especially for things you don't like doing; *Relationships:* Improving relationships through improved compassion and communication skill; *Meaning*: Considering your values, goals and purpose in life. Writing your vision and your obituary (through your grandchild's eyes!); *Accomplishment:* Achieving through self-discipline and grit savouring your accomplishments



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Optimism is characterized as the general expectation that good things will happen, or the belief that the future will be favorable because one can control important outcomes. Linked to a range of positive outcomes including how long we live.

Tackling pessimism: (i) Tune in to your most catastrophic thoughts; (ii) Treat them as if said to you by someone whose goal in life is to make you miserable; (iii) Argue back and dispute as you would to a person, rationally; (iv) Imagine worst scenario; (v)Imagine best scenario; (vi) Imagine most REALISTIC scenario; (vii) Plan accordingly.

Further reading:

Bonniwell I. (2012) *Positive Psychology in a Nutshell*. Milton Keynes, Open University Press.

Carr A. (2020) Positive Psychology and You. Oxford, Routledge.

Chatergee R. (2017) The 4 Pillar Plan. London, Penguin Life.

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positive psychology Further exploration – videos/websites and health

Rangan Chatterjee. How To Make Diseases Disappear https://www.youtube.com/watch?v=gaY4m00wXpw

Beth Frates: RCSI MyHealth: Paving the Path to Wellness

https://www.youtube.com/watch?v=aSv6-jvT02M

Martin Seligman: The New Era of Positive Psychology.

https://www.ted.com/talks/martin_seligman_the_new_era_of_positive_psychology?language=en

RCSI MyHealth Series

https://www.rcsi.com/society/national-leadership/myhealth/lecture-series

RCSI Science of Health and Happiness: http://rcsi.com/happinessresources

RCSI Coronavirus Hub: https://www.rcsi.com/dublin/coronavirus/information-for-the-public/positive-mental-health

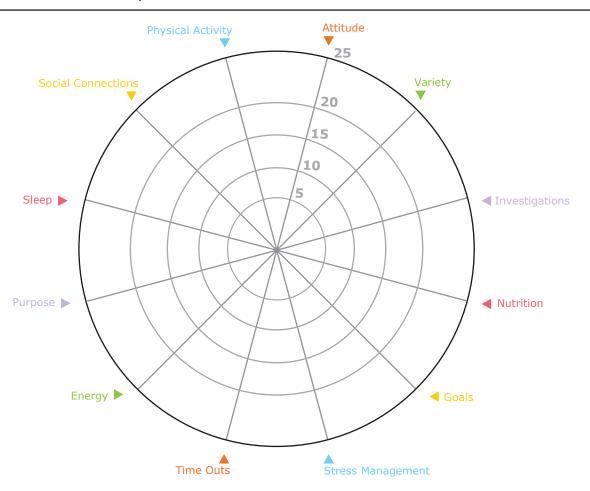
RCSI Coronavirus: Information for the public: https://www.rcsi.com/dublin/coronavirus/information-for-the-public



PAVING the Path to Wellness



Measuring your Overall Wellness Using the PAVING Wheel



HOW TO USE THIS PAVING WHEEL

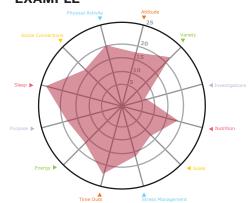
SCORE Plot your total scores for each component of the PAVING Wheel.

CONNECT Connect your scores.

EVALUATE Use the resulting PAVING Wheel (see example to the right) to evaluate areas where you may want to improve and consult the corresponding Module for more guidance.

RE-EVALUATE regularly by re-using this PAVING Wheel whenever you want to gauge your overall wellness and areas where you may want to improve.

EXAMPLE





There are no right or wrong answers. No scores are good or bad. Using the PAVING Wheel is for you alone to assess your Wellness and identify areas to improve your own personal Wellness.

INSTRUCTIONS

Rank each item on a scale of 1-5. The Key is below. Calculate the subtotal of each of the 12 sections and plot them on the PAVING Wheel on page 1.

| 1 Never do this 2 Only rarely do this | 3 Sometimes do this 4 Often do this 5 | Do this regularly as part of my routine |
|--|--|---|
| MODULE 1 Physical Activity | MODULE 3 Variety | I know proper portions for protein, |
| I exercise 5 days in the week for about a half an hour. | I do a variety of different exercises. | carbohydrates, and fats, and I eat those portions. |
| I enjoy myself when I exercise. | I try to have a rainbow of colors on my plate. | I think about the food that I eat and ask myself if it is good for my body. |
| I perform strength training exercises twice a week. | I enjoy a variety of fruits and vegetables. | I view food as fuel, as medicine, and enjoyment too. |
| I perform flexibility exercises routinely. | I like to try new activities. | Nutrition Total: |
| I perform balance exercises | I spend time and connect with a wide range of friends. | MODULE 5 Sleep |
| routinely. | Variety Total: | I sleep 7-8 hours a night. |
| Physical Activity Total: | MODULE 3 Energy | I don't drink coffee after noon time. |
| MODULE 1 Stress I have learned about stress and its | I have a friend who I know energizes me. | I have a bedtime routine in which I relax before bed. |
| effect on the mind and body. | I have identified at least one activity | I don't sleep with my phone on in the bedroom. |
| techniques, and I use at least one when I feel that I am anxious, | I am able to avoid situations and people that drain my energy. | I take 20 minute naps when I am over tired. |
| annoyed, or worried. | I only drink two cups of coffee a day. | Sleep Total: |
| I know about stress resiliency, and I practice enhancing my resiliency on | I don't rely on sugar/sweets or | MODULE 6 Goals |
| a regular basis. | cookies for a quick energy fix. | I set long-term goals for myself, |
| I don't get angry easily. | Energy Total: | share them with someone, and review them. |
| I meditate, take deep breaths, practice yoga, or do mindfulness | MODULE 4 Investigations | I set three-month goals for myself, |
| based stress reduction (MBSR) regularly. | I perform mini experiments on myself regularly. | share them with someone, and work toward them. |
| Stress Total: | I am curious as to what foods are good for my body. | I set monthly goals and share them with someone. |
| MODULE 2 Attitude I use mistakes as opportunities to | I am curious as to what effect physical activity has on my body. | I set weekly goals and share them with someone. |
| learn and grow. I write thank you notes or express | I read about the latest research findings in medicine, nutrition, sleep, | I set daily goals for myself and keep myself accountable for them. |
| my gratitude verbally. | stress management, and/or exercise. | Goals Total: |
| I celebrate success when it happens. | I talk about health with family and friends. | MODULE 6 Social |
| I concentrate on the task at hand fully without distraction. | Investigations Total: | I can name at least one person who brings me strength. |
| I am optimistic about the day. | MODULE 4 Purpose | I am involved with a group (activity, |
| Attitude Total: MODULE 2 Time outs | I feel that I have a clear purpose in life. | exercise class, art class, religious affiliation or the like) |
| If I sit for over an hour, I stand up and take a break for five minutes each | I am able to prioritize my activities and projects easily. | I visit with friends on the phone or in person at least 5 times a week. |
| hour. If I feel frustrated and annoyed, I | I make sure that my activities and projects are in alignment with my | I have a healthy relationship with my spouse, partner, or best friend. |
| take a few deep breaths to calm down. | values. I have identified the people and | I have a pet or plant that I can nurture and spend time with every |
| I take my vacation every year. | activities that are most important to me. | day. |
| When I am at home, I make sure to turn off my computer and put my | I am using my strengths to fulfill my purpose. | Social Total: |
| work projects away at least for an hour at dinner time. | Purpose Total: | |
| | | |

MODULE 5 Nutrition

I eat 4 fruits a day.

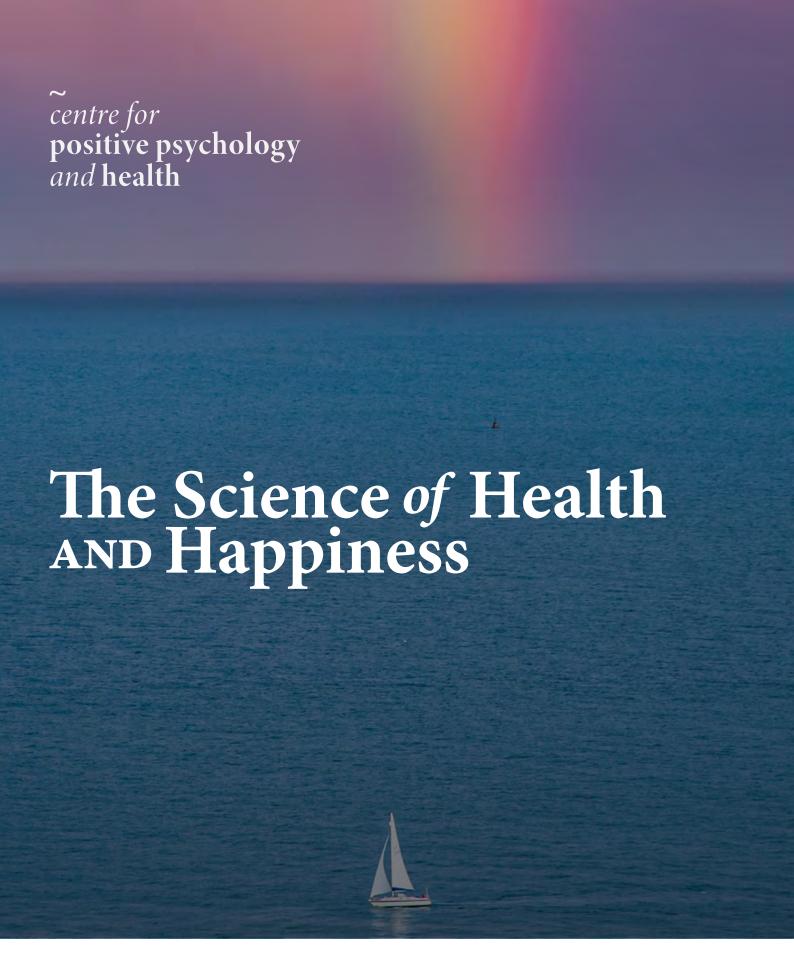
I eat 5 or more vegetables a day.

After working on the same project

get perspective on it.

Time Outs Total:

for a few hours, I step away from it to



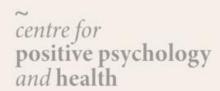
LECTURE 2

Dr Pádraic Dunne

- We have an immensely complex body with many integrated systems it has been estimated that the human body contains approximately 37.2 trillion cells.
- Our brains and minds are intimately connected to the rest of the body, as well as our social and physical environments; *happiness is dependent on healthy interactions between all of these systems.*
- The human brain can be divided into hemispheres although, the reality is more complex, broadly speaking, the *right hemisphere* is concerned with spatial, and tactile awareness as well as creativity; *it carries the music of events*. The left hemisphere is associated with *facts & stats it does the talking*.
- The brain was built from the bottom up (evolutionary and developmentally speaking)

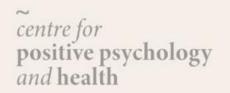
 the downstairs (*reptilian brain*) maintains activities related to survival (breathing, heart rate, etc.); the downstairs (*limbic system*) perceives threat and monitors danger, generates emotions, including fear; monitors danger; defines pleasure and pain; activates fight or flight responses; makes hormones; and regulates immune function. The upstairs brain (*neocortex*) is largest in humans and is dedicated to rational thinking; perceives time; promotes organisation and goal setting.





- Threat can be perceived in a number of ways by neuroception and via your thinking process.
- Neuroception awareness and sensing of the external environmental via the five senses; limbic system (downstairs brain) activates immediately, in response to neuroception; does not require conscious thought or decision-making.
- Negative thinking can activate the limbic system when we ruminate over past threats or worry about the potential of future threats.
- The limbic system subsequently activates a family of nerves (the autonomic nervous system) and the production of chemical messengers (hormones).
- The autonomic nervous system divided into the accelerator (sympathetic nerves) and the break (parasympathetic nerves); also associated with *fight or flight* versus rest & digest responses.





- Sympathetic nerves produce the neurotransmitter **Adrenaline**; adrenaline is also made by cells of the adrenal glands when produced by cells (as opposed by nerves), adrenaline is called a hormone.
- Adrenaline and other stress-related neurotransmitters can cause the following symptoms: accelerated heart rate and breathing, high blood pressure, reduced appetite and digestion, reduced libido, enhanced glucose (sugar) release and increased energy production, dry mouth, sweating, and dilated pupils.



- Adrenaline activates the immune response.
- **Cortisol** a stress hormone (chemical messenger), production of which is initiated by the limbic system (downstairs brain); cortisol is also made in the adrenal glands; *the purpose of cortisol is to inhibit the immune response* and act as part of *a negative feedback loop* to limit the stress response in the brain.
- Stress occurring longer than 6 weeks is called **chronic stress**, which can cause damage in the body, if left unchecked.



- Stress, in the form of adrenaline and noradrenaline, can activate the anti-bacterial part of the immune system, while simultaneously dialling down the anti-viral part.
- Immunologists believe that humans evolved to prime the immune response against bacterial infection in response to stress, as protection against bites from predators and cuts from infected environments.
- What might this bias toward an antibacterial immune response (caused by stress) mean during a global pandemic?
- Sickness behaviour, caused by the stress response, evolved to protect us from additional danger and allow us to heal and recuperate from injury and/or infection.
- Symptoms of sickness behaviour includes: isolation and anti-social behaviour, reduced appetite and libido, fatigue, apathy and disinterest, as well as and a need to sleep.
- 21st century-related stress can cause sickness behaviour in the absence of an infection or threat from wild animals.



- It is important to realise that our minds can exert a physical effect on our bodies and vice-versa.
- Whole health contributes to happiness and involves the brain, mind, and body, interacting with our social and environmental worlds.



Mind your thinking and manage stress!





Homework

<u>Awesome Breathing</u> (pacer for meditation and stress) from the Apple App Store or Google Play

Alternatively for PC: xhalr.com

Practice breathing for 2 minutes, twice daily.





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SCIENTIFIC REVIEW:

Irwin, M. Reciprocal regulation of the neural and innate immune systems. Nature Reviews Immunology 11, 625–632 (2011).

ARTICLE:

How many cells in your body? National Geographic – Carl Zimmer – October 23, 2013

BOOK:

Why Zebras Don't Get Ulcers by Dr Robert M. Sapolsky. St. Martins Press; revised and updated edition (1 Jan. 2004).



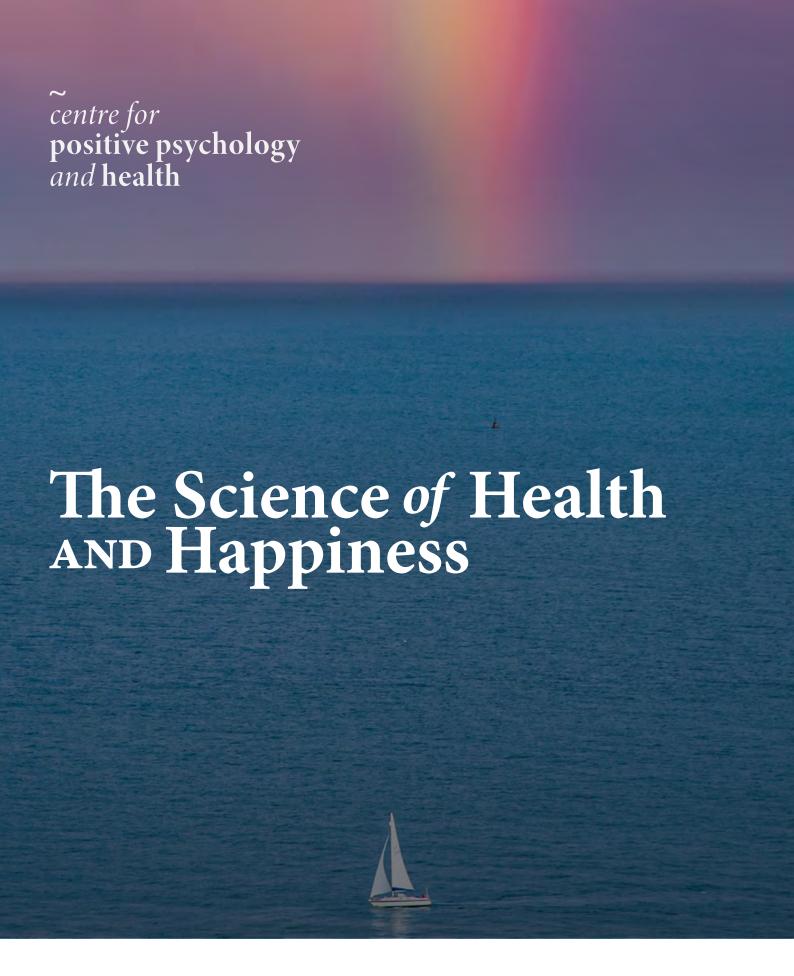
Further exploration - videos/websites

Cellular landscape cross-section through a eukaryotic cell, by Evan Ingersoll & Gael <u>McGill.gaelmcgill.artstation.com/projects/PmoJL1</u>

Why Zebras Don't Get Ulcers by Dr Robert Sapolsky. Stanford University - Inaugural Fenton-Rhodes Lecture on Proactive Wellness

www.youtube.com/watch?v=D9H9qTdserM



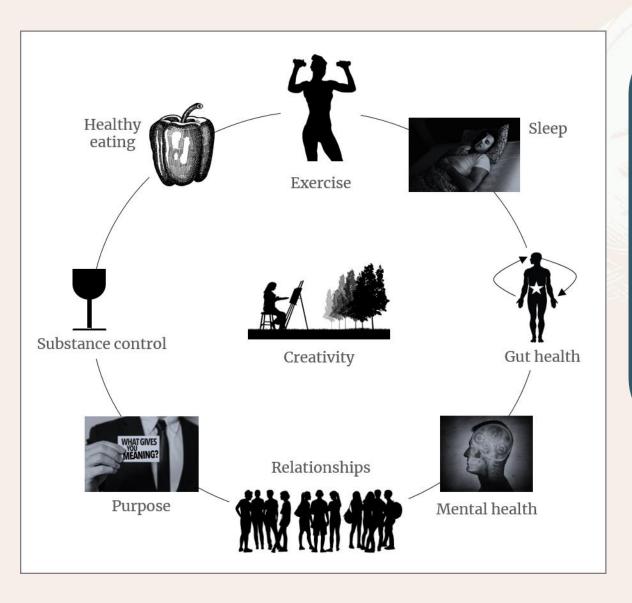


LECTURE 3: WHOLE PERSON HEALTH

Dr Pádraic Dunne

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Components of whole person health

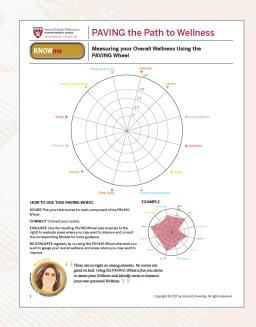


Make a table

Score yourself out of 10; if you score lower than 6, you need to make a plan to improve your score.

| Activity | 1 to 10 |
|-------------------|---------|
| Exercise | 6 |
| Diet | F |
| Meaning | 3 |
| Relationships | 5 |
| Sleep | 2 |
| Substance control | F |
| Gut health | 3 |
| Creativity | 5 |

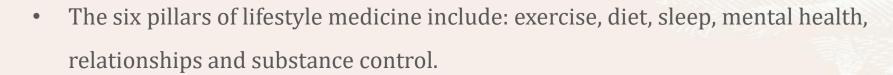
(1 = poor; 10 = good)





RCSI Science of Health and Happiness: NOTES LECTURE 3 Whole Person Health

- Lifestyle Medicine and Integrative Medicine represent emerging, evidence-based approaches to medicine that place the patient at the centre of healthcare.
- These models take an inclusive, integrated approach to prevention and care of disease by focusing on whole person health that includes physical, mental, social and the environment.



We use the following to make it easy to remember aspects of whole person health:
 brain, body, belly, bed & best-friends.





RCSI Science of Health and Happiness: NOTES LECTURE 3 Whole Person Health

 Approximately 20 years ago, five geographical locations were noted to have a greater number of centenarians (humans who live 100 years and older) than anywhere else.

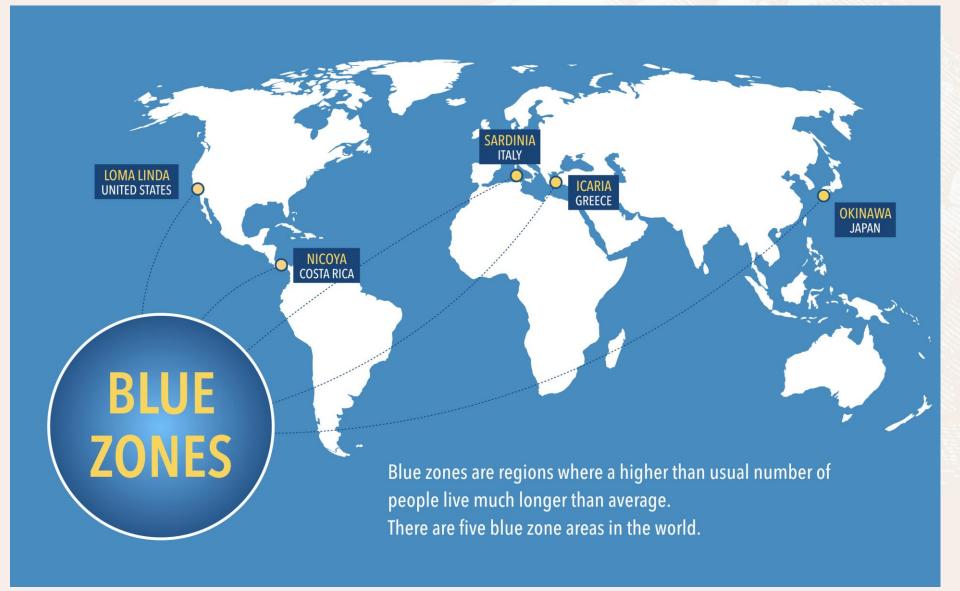


- These locations include: Loma Linda (US); Nicoya Peninsula (Costa Rica);
 Nuoro Province, Sardinia (Italy); Ikaria (Greece); Okinawa (Japan).
- These regions were subsequently called, the blue zones.
- Since then, a number of additional regions have been studied.





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Centenarian rates in the blue zones

Table 1: Centenarian Rate (CR) for the 1900 birth cohort (number of persons surviving to 100 years for 10,000 persons alive at 60 years)

| Country | Females aged 60 in 1960 | Females aged 100 in 2000 | Female CR | Males aged 60 in 1960 | Males aged 100 in 2000 | Male CR |
|-------------------|----------------------------|-----------------------------|--------------|--------------------------|---------------------------|-------------|
| Italy | 248 571 | 1 941 | 78.1 | 212 849 | 412 | 19.4 |
| of which Sardinia | 5 889 | 64 | 108.7 | 5 594 | 25 | 44.7 |
| Japan | 310 764 | 3 948 | 127.1 | 305 703 | 900 | 29.5 |
| of which Okinawa | 2 925 | 145 | 495.7 | 2 069 | 17 | 82.2 |
| France | 270 842 | 2 965 | 109.5 | 239 348 | 450 | 18.8 |
| The Netherlands | 52 213 | 388 | 74.4 | 47 247 | 83 | 17.6 |
| Norway | 19 652 | 146 | 74.3 | 17 798 | 27 | 15.2 |
| Sweden | 41 928 | 315 | 75.1 | 39 262 | 72 | 18.3 |
| Switzerland | 30 877 | 271 | 87.8 | 25 808 | 59 | 22.9 |
| Australia | 42 812 | 524 | 122.5 | 40 212 | 84 | 21.0 |
| Belgium | 57 847 | 300 | 51.8 | 50 438 | 51 | 10.1 |
| Canada | 60 070 | 1 080 | 179.8 | 61 456 | 244 | 39.7 |
| Denmark | 24 465 | 160 | 65.4 | 22 076 | 31 | 14.0 |
| Finland | 21 965 | 90 | 41.0 | 16 671 | 28 | 16.8 |
| Poland | 122 695 | 336 | 27.4 | 97 732 | 76 | 7.8 |
| Russia | 470 626 | 1 605 | 34.1 | 235 003 | 201 | 8.5 |
| UK | 318 869 | 2 438 | 76.5 | 270 280 | 288 | 10.6 |
| USA | 780 115 | 12 706 | 162.9 | 728 821 | 2 253 | 30.9 |

Source: Human Mortality Database (stock data) and national census data available through national statistical institutes for Sardinia and Okinawa.

Table 1 Comparative figures on centenarian prevalence and sex ratio

| Countries and regions | Date | Prevalence (number of living centenar- ians per 100.000 inhabitants) | Sex ratio (among living centenarians females/males) |
|-----------------------|------------------|---|--|
| Belgium | January 1st 2002 | 10.5 | 7.08 |
| Denmark | July 1st 2002 | 10.4 | 6.27 |
| Sweden | January 1st 2003 | 12.6 | 5.64 |
| Italy | January 1st 2001 | 14.1 | 3.80 |
| Sardinia | January 1st 2001 | 16.6 | 2.70 |
| Nuoro province | January 1st 2001 | 17.9 | 1.40 |

Source: statistical offices of respective countries.

RCSI Science of Health and Happiness: NOTES LECTURE 3 Whole Person Health

Take home messages from the lifestyles of blue zone citizens:

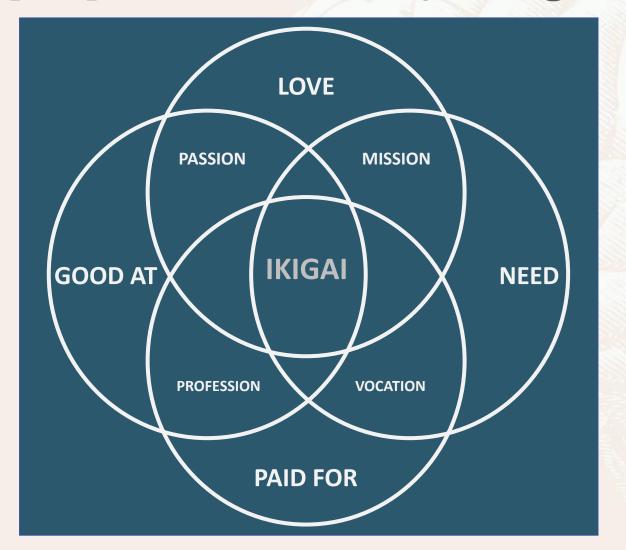
- Eat mostly plants
- Eat less
- Have a garden and eat fresh
- Engage in daily exercise natural movement
- Family & community first
- Engage in activities that cultivate meaning, purpose & creativity

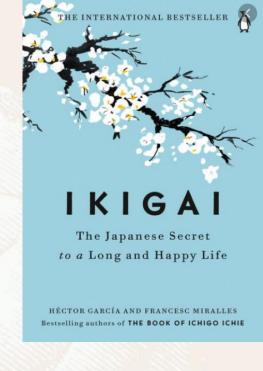




centre for positive psychology and health

Activities that cultivate meaning, purpose & creativity - *Ikigai*







Homework

| | | Facing outward | | |
|--|--|---|-------|-------------------|
| Ikigai core concepts related to work and other practices in life | CURRENT JOB – remind yourself why you are doing it | Relationships with others, including charity work | Sport | Creative pursuits |
| What do you love? PASSION | | | | |
| What are you good at? MISSION | | | | |
| Does the world need what you are good at? | | | | |
| Can you get paid for it? | | | | |



Homework example - what is your Ikigai?

| | | Facing outward | | |
|--|---|---|----------------------------|------------------------------------|
| Ikigai core concepts related to work and other practices in life | CURRENT JOB – remind yourself why you are doing it | Relationships with others, including charity work | Sport | Creative pursuits |
| What do you love? PASSION | Education and learning | Helping others | Being part of a team | Theatre and performance |
| What are you good at? MISSION | Helping others understand complicated theories and subjects | Listening | Running | Singing |
| Does the world need what you are good at? | The world always needs good teachers | Yes | We need social interaction | Yes – we need to be entertained |
| Can you get paid for it? | Definitely | Work on a charity helpline | Join a running club | Join a choir |

References

Scientific articles

Michel Poulain, Anne Herm and Gianni Pes. The Blue Zones: areas of exceptional longevity around the world. Vienna Yearbook of Population Research 2013 (Vol. 11), pp. 87–108

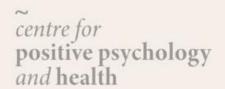
Books

Integrative Medicine by David Rakel. Elsevier; 4th edition (24 May 2017)
Lifestyle Medicine by Garry Egger. Academic Press; 3rd edition (6 April 2017)

Article

Essentially, ikigai is the reason why you get up in the morning" Yukari Mitsuhashi; 8th August 2017 – BBC.com





Further exploration - videos/websites

Websites

integrativemedicine.arizona.edu/

online-learning.harvard.edu/course/introduction-lifestyle-medicine-0?delta=0

https://www.instituteoflifestylemedicine.org/

www.bethfratesmd.com/

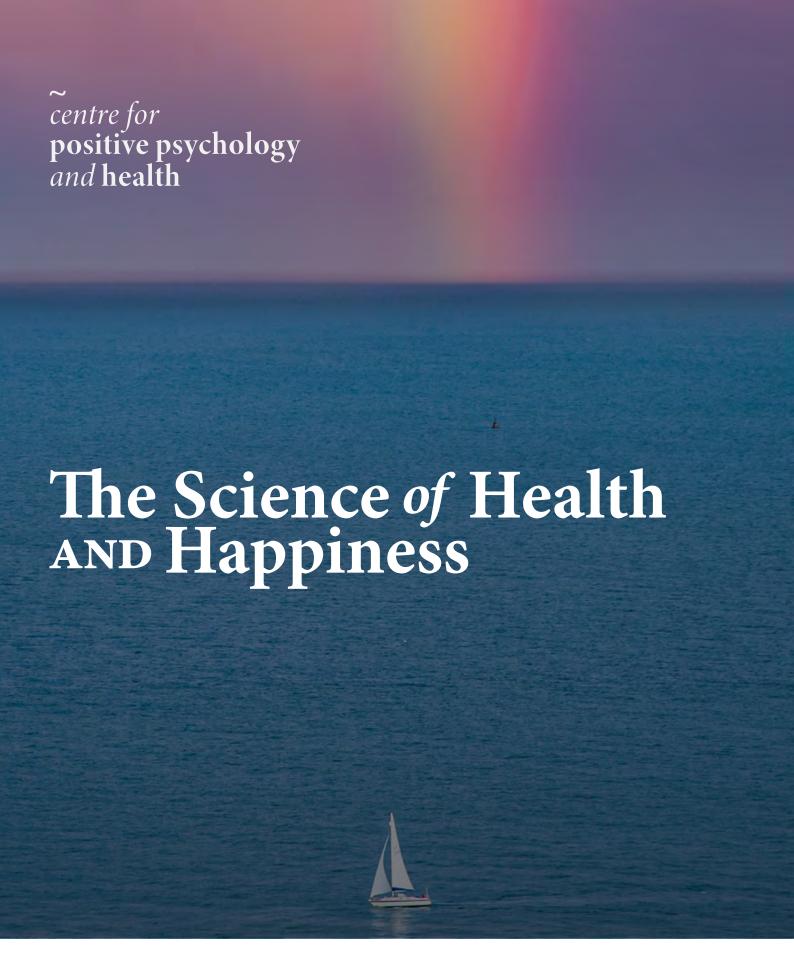
rcsi.com/dublin/postgraduate/taught-courses/positive-health/why-rcsi

https://www.bluezones.com/

Video links

www.ted.com/talks/dan_buettner_how_to_live_to_be_100





LECTURE 4: WHAT ARE THE ROUTES TO HAPPINESS?

Professor Ciaran O'Boyle

resource manual

positive psychology Notes: Lecture 4: What are the routes to happiness? I

- 1. WHO definition of mental health: a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. https://www.who.int/features/factfiles/mental-health/en/
- 2. World Happiness Report: https://worldhappiness.report
- **3. The Dichotomy of Control:** "The chief task in life is simply this: to identify and separate matters so that I can say clearly to myself which are externals not under my control, and which have to do with the choices I actually control. Where then do I look for good and evil? Not to the uncontrollable externals, but within myself to the choices that are my own..." Epictetus, Discourses 2.5.4-5
- 4. Factors influencing happiness: Building relationships; Setting highly valued goals; Identifying and using personal strengths; Savouring pleasures; Finding flow; Being grateful; Developing an optimistic outlook; Strengthening couple relationships; Strengthening parent-child relationships; Practising forgiveness; Regular physical exercise; Mindfulness meditation; Progressive muscle relaxation; Problem solving and solution finding; Being courageous; Courageously managing anxiety; Assertively managing anger; Developing grit and resilience; Learning to live with trauma.
- **5. Mindsets**: The view you adopt for yourself profoundly affects the way you lead your life; Growth and Fixed Mindsets: https://www.youtube.com/watch?v=EO5Yz2x0GSk
- **6. Developing a growth mindset**: Embrace challenges; Persist in the face of setbacks; See effort as part of the journey; Learn from criticism; Find lessons and inspiration in the resilience of others; Tap into your "calling".



positive psychology Notes: Lecture 4: What are the routes to happiness? I

- **Gratitude:** (i) An affirmation of goodness; (ii) Sources of this goodness are outside of ourselves; (iii) The social dimension is especially important.
- **Time Perspective**: "A fundamental dimension in the construction of psychological time that emerges from cognitive processes partitioning human experience into past, present and future temporal frames" https://www.thetimeparadox.com/zimbardo-time-perspective-inventory/
- The 5 time perspectives: past positive; past negative, present fatalistic, present hedonic, future.
- **Flexible Balanced Time Perspective**: Low on past negative; Low on present fatalistic; High on past positive gives you ROOTS; Moderate on present hedonistic gives you ENERGY; Moderately high on future- gives you WINGS; Key is being able to adopt a time perspective appropriate to the situation.
- "True happiness is to enjoy the present, without anxious dependence upon the future, not to amuse ourselves with either hopes or fears but to rest satisfied with what we have, which is sufficient, for he that is so wants nothing. The greatest blessings of mankind are within us and within our reach. A wise person is content with his lot whatever it may be, without wishing for what he has not." -Seneca.

centre for positive psychology and health Exercises

- 1. Complete the *PERMA Profiler* to assess your current level of happiness. Reflect on the results and how you might use your understanding of the various components of PERMA to increase your happiness. You will find the questionnaire on the Authentic Happiness website at the University of Pennsylvania. You will need to register (for free) to access the questionnaire. https://www.authentichappiness.sas.upenn.edu/testcenter
- 2. Complete the *Zimbardo Time Perspective Inventory* and reflect on your scores. Use your profile to become aware of how you currently perceive time and what the implications of your profile are for you. How might you develop more a balanced time perspective? https://www.thetimeparadox.com/zimbardo-time-perspective-inventory/
- 3. Begin to keep a *gratitude journal*
 - Set aside 10 minutes per day (or weekly), preferably in the evening
 - List three good things that happened today (this week), that you can give other people, a higher spiritual entity or nature some credit for.
 - Visualise the good thing happening and write down:
 - What exactly happened
 - Why you think it happened
 - What it means to you
 - All the reasons you can think of that explain why you think it went well
 - Whether or not you told someone that it happened
 - What you can do to make it happen again, and remember next time to tell someone about it
 - Before and after the exercise rate how you are feeling on a 10 point scale where 1= "extremely sad" and 10 = "extremely happy"



centre for positive psychology Further reading and health

Suggested popular texts:

Boniwell I. (2012). *Positive Psychology in a Nutshell*. Maidenhead, Open University Press.

Carr A. (2020). *Positive Psychology and You: A Self-Development Guide*. Oxon, Routledge

Dweck CS. (2017). *Mindset: Changing The Way You Think To Fulfil Your Potential*. (Revised ed.) London,
Robinson.

Emmons R (2007). *Thanks: How Practicing Gratitude Can Make You Happier*. Boston MA, Houghton Mifflin. Zimbardo P, Boyd J (2008). *The Time Paradox: The New Psychology of Time*. New York, Free Press.

Technical references:

Emmons RA, McCullough ME (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. J Pers Soc Psy 84(2), 377-389

Emmons RA (2013) Gratitude Works: A 21 day programme for creating emotional prosperity. San Franscisco , CA, Jossey-Bass

Emmons R, McCullough. (2004) *The Psychology of Gratitude*. Oxford, OUP. Smith JA et al. (2020). *The Gratitude Project*. Oakland, New Harbinger.



centre for

positive psychology Further exploration - videos

Professor Carol Dweck speaks at the RCSI

World famous psychologist Professor Carol Dweck, author of Mindset, delivered the Foley Lecture at the RCSI University of Medicine and Health Sciences in 2018. A brief edited version of the lecture can be found here.

https://www.youtube.com/watch?v=EO5Yz2x0GSk

Professor Carol Dweck speaks at Stanford on mindsets

Here Carol Dweck speaks about developing a growth mindset in children and explains the power of "not yet". https://www.youtube.com/watch?v=hiiEeMN7vbQ

Professor Philip Zimbardo on the psychology of time

2009 TEDx talk in which Philip Zimbardo, most famous for the Stanford Prison Experiment, does a whistle-stop tour of time perspectives based on his book The Time Paradox. For Zimbardo happiness and success are rooted in a trait most of us disregard: the way we orient toward the past, present and future. https://www.ted.com/talks/philip_zimbardo_the_psychology_of_time?language=en_

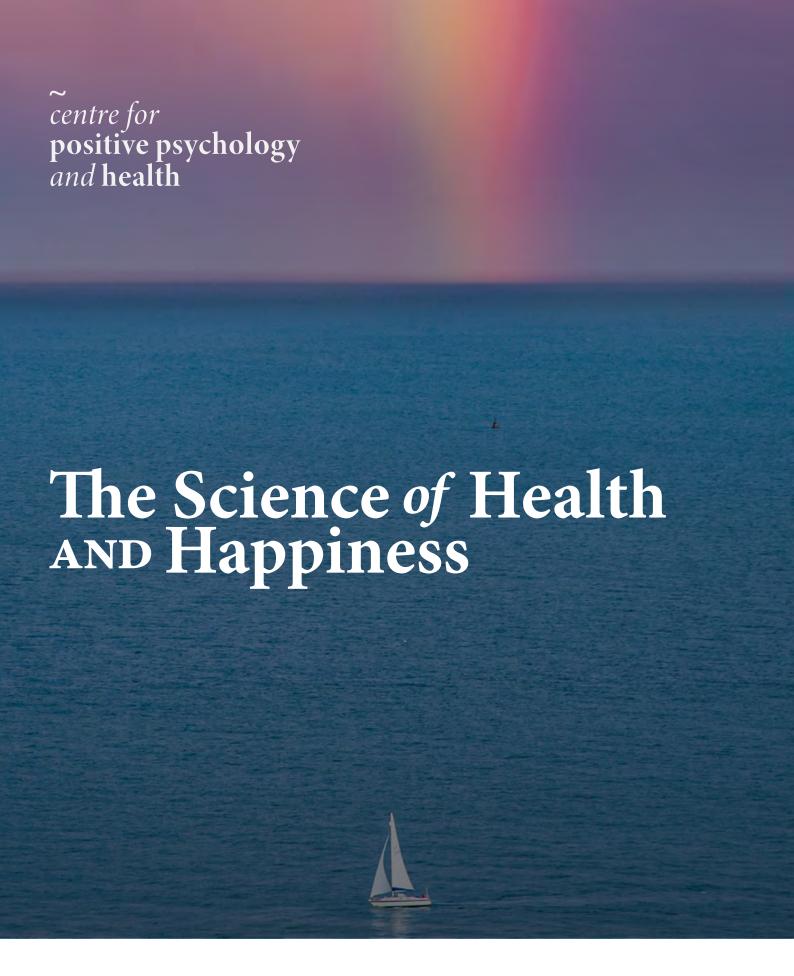
Oprah Winfrey speaks about her gratitude journal

In this short, not-even-4-minute video, Oprah focuses on the power of gratitude by discussing what she has learned from her own gratitude journal, an exercise she had been practicing for 16 years at the time of the talk. https://www.youtube.com/watch?v=saZWjIlwU8c

Professor Robert Emmons on gratitude

A short video from 2010 of the world's leading researcher on the psychology of gratitude speaking about the benefits of gratitude https://www.youtube.com/watch?v=RRrnfGf5aWE





LECTURE 5: ROUTES TO HAPPINESS II

Dr Trudy Meehan, Lecturer and Senior Clinical Psychologist

Micro-moments of Positivity Resonance

Brian Synch

- Person in fMRI listening to another person tell a story
- Brain activity mirrored extensively
- The insula (area in the brain linked to conscious feeling state)
- Suggests that two people come to feel one shared emotion
- How well one listened predicted the amount of brain coupling

Body Synch

- The Vagus Nerve important for fight flight response but also used in the calm and connect response as it soothes your racing heart (together with oxytocin)
- Vagal tone the higher the better
- Higher vagal tone = more flexible across a range of domains (physical, mental, social)
- Higher vagal tone = more skilled socially and forge more positive relationships = more micro moments of love
- Use it or lose it!

Chemistry Synch

- Oxytocin "cuddle hormone", key role in social bonding
- Oxytocin "appears both to calm fears that might steer you away from interacting with strangers and also to sharpen your skills for connection" (Fredrickson, p. 51)
- Oxytocin one person's oxytocin flow can trigger your own



Compassion and Empathy

Empathy

We know that empathy, which is when we feel and understand (but take no action) causes the pain centres of the brain to light up in the person doing the empathy

Compassion

We know that compassion causes the reward and affiliation centres of the brain to light up





Self-Compassion

- Mindfulness awareness and acceptance (letting go) of pain
- Common humanity avoiding isolation or shame by seeing one's experiences as part of the human condition
- **Kindness** being kind and warm rather than harsh in the face of setbacks



- Chierchia, G., & Singer, T. (2017). Chapter 20 The Neuroscience of Compassion and Empathy and Their Link to Prosocial Motivation and Behavior (pp. 247-257). In J.C. Dreher, & L. Tremblay (Eds). *Decision Neuroscience*. Cambridge, MA. Academic Press.
- Claus, L. Decety, J., & Singer, T. (2011). Meta-Analytic Evidence for Common and Distinct Neural Networks Associated with Directly Experienced Pain and Empathy for Pain. *Neuroimage 54(3)*, 2492-502. https://doi.org/10.1016/j.neuroimage.2010.10.014
- Dick, A. S., Goldin-Meadow, S., Hasson, U., Skipper, J. I., & Small, S. L. (2009). Co-speech gestures influence neural activity in brain regions associated with processing semantic information. *Human brain mapping*, *30*(11), 3509-3526.
- Fredrickson, B. (2014). *Love 2.0: Creating happiness and health in moments of connection*. New York, New York. Plume Penguin House.
- Hanafin, S., Cosgrove, J., Hanafin, P., Brady, A. M. & Lynch, C. (2020). Professional burnout and its prevalence among public health nurses in Ireland. *British Journal of Community Nursing*, 25(8),370-375 https://doi.org/10.12968/bjcn.2020.25.8.370
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspectives on psychological science*, 10(2), 227-237.
- Hofmeyer, A., Kennedy, K., & Taylor, R. (2020). Contesting the term 'compassion fatigue': Integrating findings from social neuroscience and self-care research. Collegian, 27(2), 232-237. https://doi.org/10.1016/j.colegn.2019.07.001



- Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in psychiatric treatment*, *15*(3), 199-208.
- Klimecki, O. M., Leiberg, S., Ricard, M., & Singer, T. (2014). Differential pattern of functional brain plasticity after compassion and empathy training. *Social cognitive and affective neuroscience*, 9(6), 873-879.
- Klimecki, O. M., Leiberg, S., Lamm, C., & Singer, T. (2013). Functional neural plasticity and associated changes in positive affect after compassion training. *Cerebral cortex*, *23*(7), 1552-1561.
- Lamm, C., Decety, J., & Singer, T. (2011). Meta-analytic evidence for common and distinct neural networks associated with directly experienced pain and empathy for pain. *Neuroimage*, *54*(3), 2492-2502.
- Lown, B. A., Dunne, H., Muncer, S. J., & Chadwick, R. (2017). How important is compassionate healthcare to you? A comparison of the perceptions of people in the United States and Ireland. *Journal of Research in Nursing 22(1-2)*, 60-69.
- Margiotta, F., Crudden, G., Byrne, D. *et al.* Prevalence and co-variates of burnout in consultant hospital doctors: burnout in consultants in Ireland Study (BICDIS). *Ir J Med Sci* **188,** 355–364 (2019). https://doi.org/10.1007/s11845-018-1886-y



- Neff KD (2003a) Self-compassion. An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, *2*, 85–102.
- Neff KD (2003b) The development and validation of a scale to measure self-compassion. *Self and Identity*, *2*, 223–50.
- Rosenfeld, A. J. (2019). The Neuroscience of Happiness and Well-Being What Brain Findings from Optimism and Compassion. *Child Adolesc Psychiatric Clin N Am 28*, 137–146. https://doi.org/10.1016/j.chc.2018.11.002
- Seppala, E., Hutcherson, C., Nguyen, D., Doty, J., & Gross, J. (2014). Loving-kindness meditation: A tool to improve healthcare provider compassion, resilience and patient care. *Journal of Compassionate Health Care*, 1(5), 1-9. http://dx.doi.org/10.1186/s40639-014-0005-9
- Stephens, G. J., Silbert, L. J., & Hasson, U. (2010). Speaker-listener neural coupling underlies successful communication. *Proceedings of the National Academy of Sciences of the United States of America*, 107(32), 14425–14430. https://doi.org/10.1073/pnas.1008662107
- Trzeciak, S., & Mazzarelli, A. (2019). *Compassionomics: The revolutionary scientific that caring makes a difference*. Pensacola, FL. Studer Group.



Homework

- Be kind to strangers (Positivity Resonance = Love)
- Loving kindness meditation <u>https://www.youtube.com/watch?v=LkC0K1F8nPk&list=PL6DbJmB3fDQp <u>vwTqepv7LDjx3UqB2Ht5&index=5</u>
 </u>
- Compassionate gestures every time you touch a hot drink/glass of water, do a compassionate gesture
- Do the Self Compassion Questionnaire
 https://self-compassion.org/test-how-self-compassionate-you-are/

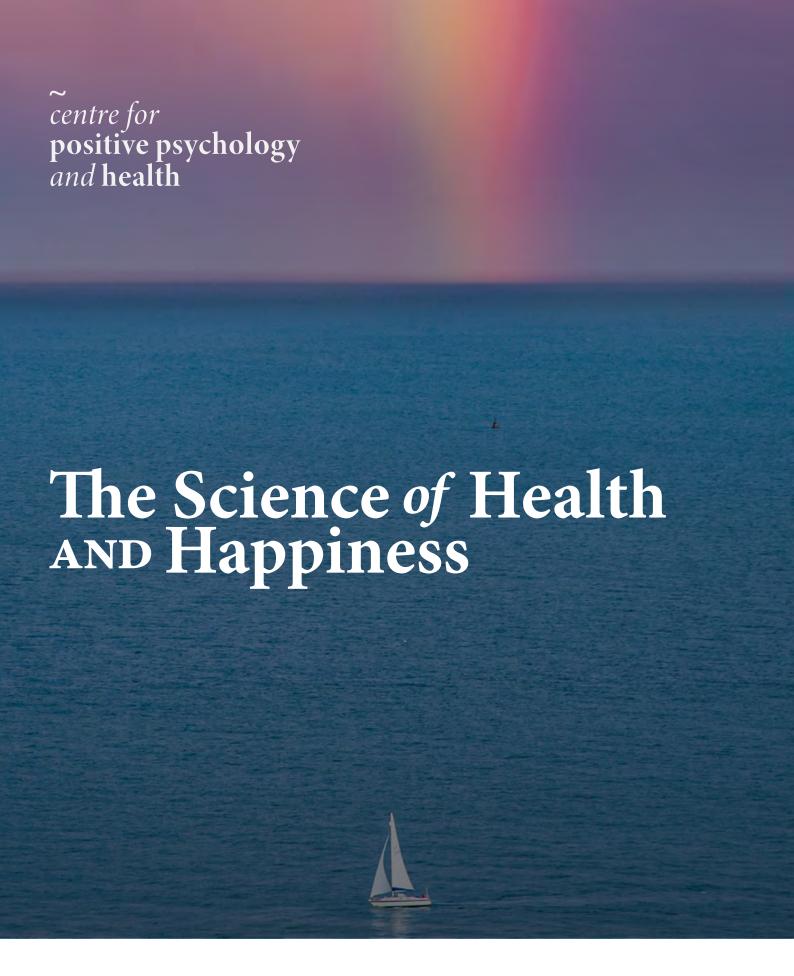


Video on Compassion(Kirstin Neff)
 https://www.youtube.com/watch?v=rUMF5R7DoOA

Video on Love (Barbara Fredrickson)
 https://www.youtube.com/watch?v=fHoEWUTYnSo







LECTURE 6: MEDITATION FOR HEALTH

Dr Pádraic Dunne

Meditation – myths & facts

Meditation is all in your head

Meditation is all about stopping your thoughts and wiping your mind

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

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

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



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



It is not possible to completely stop your thinking process



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



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



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

Levine GN, Lange RA, Bairey-Merz CN, et al. Meditation and Cardiovascular Risk Reduction: A Scientific Statement From the American Heart Association. *J Am Heart Assoc.* 2017;6(10):e002218. Published 2017 Sep 28.

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



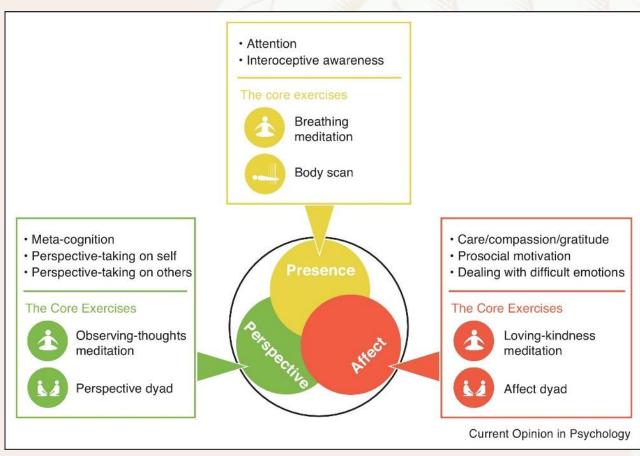




Not all meditations are the same

Attention-based Training (ABT) Mantra meditation

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



Loving-kindness meditation; Gratitude-based meditation

(Develop compassion for self and other)



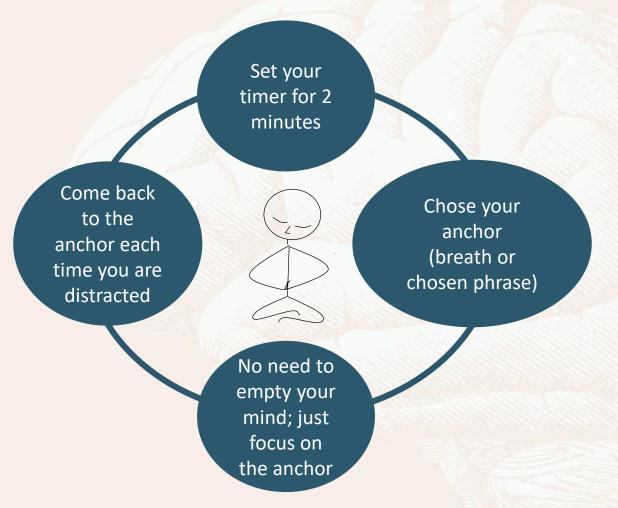
Mindfulness meditation

(Metacognition; develop perspective of self and other)

From: Singer & Engert. Current Opinion in Psychology. Volume 28 (August 2019) https://www.resource-project.org/en/

EYES TONGUE SPINE Straight but not rigid HANDS Rest on your laps HIPS Need to be higher **KNEES** Choose an anchor The breath or **Chosen phrase:** "I Am Here Now"

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



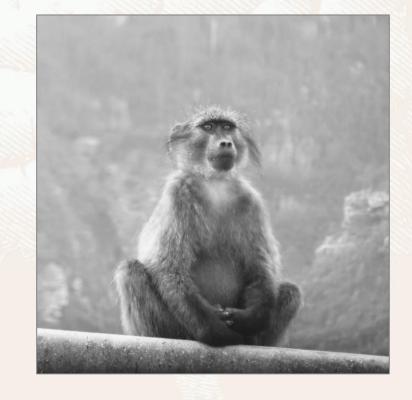
The body scan meditation

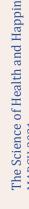
A member of the concentration, presence, attention, focus style of meditation that places emphasis on areas of the body while breathing normally.

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=PLmcXs1oNVn8mZOWQi6RQX PYDBnP6D13lF

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 bee 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 Zazen 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 an others

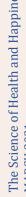




Summary (II)

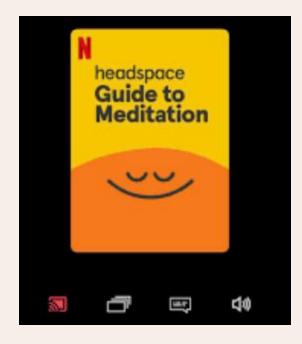


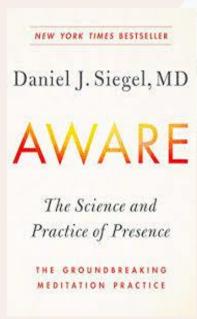
- Attention-based Training (ABT; second type of meditation practice based on mantra meditation) involves using an anchor (the breath or a chosen phrase/mantra) to help you disengage from thoughts, memories, emotions and sensations on a moment by moment basis
- The central ABT practice can help to restore 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

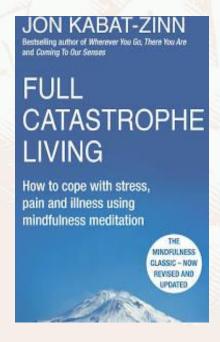


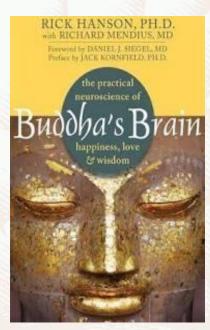


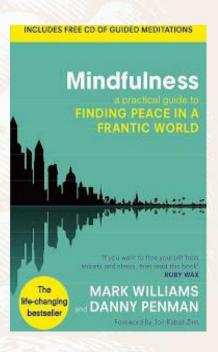
Recommended viewing & reading















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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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.

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

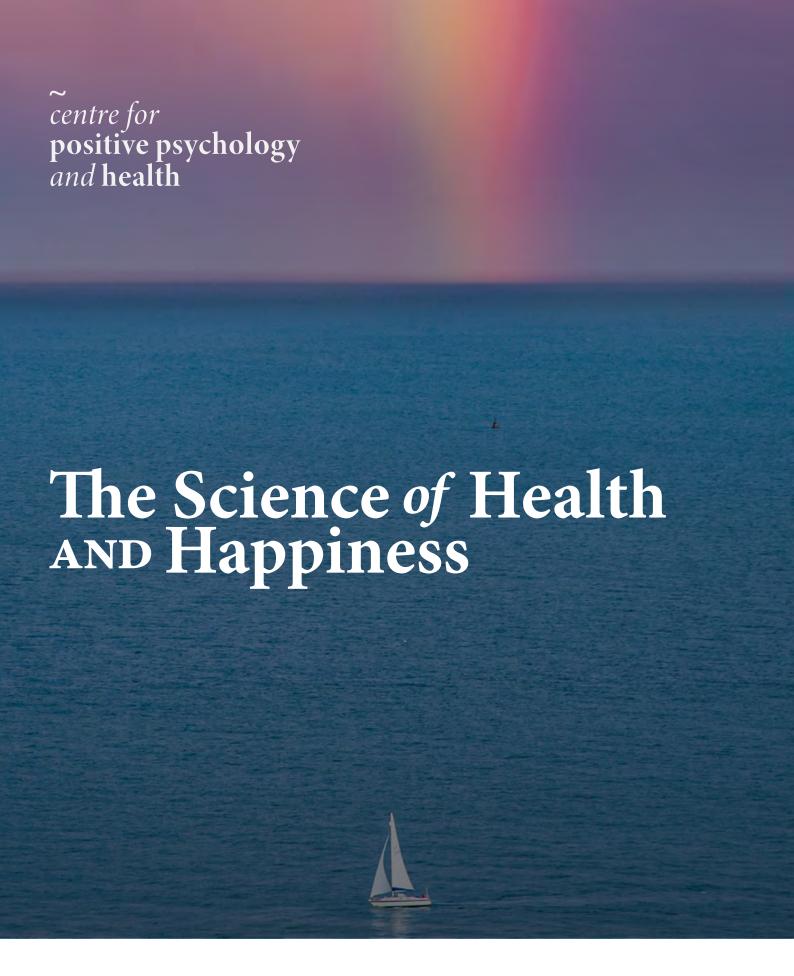


Websites

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

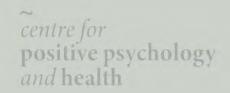
https://www.ucl.ac.uk/news/2009/aug/how-long-does-it-take-form-habit





LECTURE 7: YOUR EMOTIONS AND YOU

Dr Trudy Meehan, Lecturer and Senior Clinical Psychologist



Positive Emotions

Hedonic Positive Emotions

- Joy
- Amusement

Eudaimonic Positive Emotions

- Gratitude
- Serenity
- Interest
- Hope
- Pride
- Awe
- Love
- Inspiration



Broaden and Build

Broaden

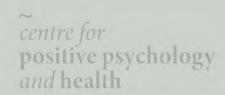
- **Mind opens up** (think outside the box)
- More creative and innovative
- Generate solutions
- More receptive to alternatives
- Expand mindset
- Enhance verbal creativity tasks

Build

When we broaden our thinking we develop real and lasting skills that add to our repertoire of behaviours:

- Intellectual (problem solving; openness to learning; visualising)
- **Physical** (increased cardiovascular health; improved coordination)
- **Social** (maintaining and creating relationships)
- **Psychological** (resilience; optimism; sense of identity; goal orientation)





STUDY: A wandering mind is an unhappy mind

- People's minds wandered frequently, regardless of what they were doing mind wandering occurred in 46.9% of the samples (2,250 adults)
- People were less happy when their minds were wandering than when they were not **people were no** happier when thinking about pleasant topics
- Mind wandering was generally **the cause**, and not merely the consequence, of unhappiness
- What people were thinking was a better predictor of their happiness than was what they were doing

Killingsworth MA, Gilbert DT. A wandering mind is an unhappy mind. Science. 2010 Nov 12;330(6006):932.



A note on negative emotion

- Negativity Bias
- Humans and animals have a bias towards attending to negative versus positive stimuli
- Baumeister et al. (2001) Bad is stronger than good
- Magic ratio 3:1 positive emotions (Fredrickson & Losada, 2005).





Emotional Intelligence

The capacity to:

- Acknowledge emotions
- Discern between emotions
- Engage effectively with our (and others) emotions

"The ability to monitor one's own and other's feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189)





Homework

- <u>www.positivityratio.com</u>
- 3:1 ratio of positive emotions to negative emotions
- Track your emotion ratio over two weeks
- Do you need to cultivate more positive emotions in your daily life?



Homework

- Take one of Fredrickson's positive emptions (joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, awe and love).
 - When was the last time I felt this feeling?
 - Where was I?
 - What was I doing?
 - What else gives me that feeling?
 - Can I think of more triggers for that feeling?
 - What can I do to cultivate this feeling?

Fredrickson, 2009, p. 40



Homework

- Loving kindness meditation
 https://www.youtube.com/watch?v=LkC0K1F8nPk&list=PL6DbJmB3fDQp_vwTqepv7LDjx3UqB2Ht5&index=5
- Compassionate gestures every time you touch a hot drink/glass of water, do a compassionate gesture
- Prof. Ian Robertson TedTalk Stress can make you Sharper https://www.youtube.com/watch?v=RnJAtztON84
- Stress as enhancing mindset

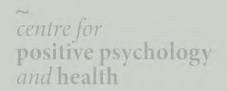
http://sparqtools.org/rethinkingstress/

- Ashby, F. G., Isen, A. M., & Turken, A. U. (1999). A neuropsychological theory of positive affect and its influence on cognition. *Psychological Review*, *106*(*3*), 529-550.
- Baumeister R. F., Bratslavsky, E., Finkenauer, C, & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(*4*), 323-370.
- Brooks, A. W. (2014). Get excited: Reappraising pre-performance anxiety as excitement. *Journal of Experimental Psychology: General*, 143(3), 1144.
- Crum, A. J., Salovey, P., & Achor, S. (2013). Rethinking stress: The role of mindsets in determining the stress response. *Journal of personality and social psychology*, 104(4), 716.
- Csikszentmihalyi, M. (1996). *Creativity: Flow and the psychology of discovery and invention*. New York, NY: Harper Collins.
- Dweck, C. S. (2017). *Mindset: Changing the way you think to fulfill your potential*. London. Robinson.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*(3), 218-226.



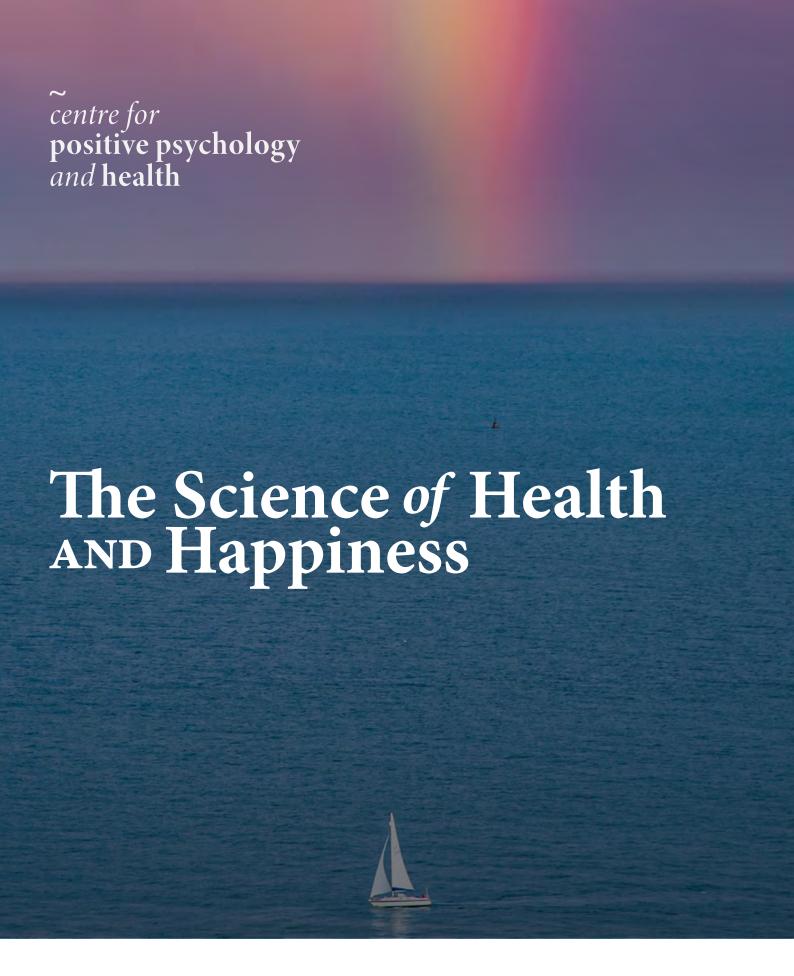
- Fredrickson, B.L., & Losada, M.F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, *60*(*7*), 678-86.
- Fredrickson, B. L. (2009). *Positivity: Groundbreaking Research to Release your Inner Optimism and Thrive*. New York, NY: Crown.
- Fredrickson, B. L. (2013). Positive emotions broaden and build. *Advances in Experimental Social Psychology*, *47*(1), 1-53.
- Salovey, P. & Mayer, J. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9, 185-211.
- Sheldon, K. M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: the effects of expressing gratitude and visualizing best possible selves. *Journal of Positive Psychology*, 1, 73-82





- Gardner, T., Refshauge, K., McAuley, J., Goodall, S., Hübscher, M., & Smith, L. (2016). Patient-led Goal Setting. *SPINE*, *4*(18), 1405-1413.
- Isen, A. M. (1990) The influence of positive and negative affect on cognitive organization: Some implications for development pp. 75-94. In: Stein N, Leventhal B, Trabasso T, (Eds.) *Psychological and biological approaches to emotion*. Hillsdale, NJ: Erlbaum.





LECTURE 8: YOUR STRONGEST SELF

Professor Ciaran O'Boyle

centre for positive psychology and health

RCSI Science of Health and Happiness: Notes Lecture 8

- 1. The context for looking at our strengths is the PERMA model of happiness and the research that shows that the way we think about things is crucial
- 2. The VIA Institute on Character is a major resource for understanding and using your strengths. https://www.viacharacter.org
- 3. Early key research by a large team of scientists led to the publication in 2004 of Chris Petersen's and Martin Seligman's key text *Character Strengths and Virtues A Handbook and Classification*.
- 4. The 6 ubiquitous virtues are: Wisdom, Courage, Humanity, Justice, Temperance and Transcendence
- 5. Our character strengths are our means of achieving the virtues
- 6. Character strengths are: positive traits and capacities that are personally fulfilling and reflect our personal identity; influence how we think act and feel; do not diminish others but produce positive outcomes; are ubiquitous and valued across all cultures; are expressed in combination, in degrees and in context; are stable, but capable of changing
- 7. Research shows that focusing on our character strengths makes us 9 times more likely to be flourishing, helps achieve PERMA, attenuates our negative bias, engenders positive outcomes in business, education, healthcare, coaching, psychotherapy and counselling, decreases stress at work, leads to less friction in the classroom, increased academic achievement, less depression, better physical health and increased well-being
- 8. Your Signature strengths are your 4-7 strongest or most prominent strengths. They are **essential**, **effortless and energising**.

"The good life consists in deriving happiness by using your signature strengths every day in the main realms of living. The meaningful life adds one more component: using these same strengths to forward knowledge, power and goodness. A life that does this is pregnant with meaning, and if God comes at the end, such a life is scared" Professor Martin Seligman

The Via Strengths and Virtues

| WISDOM | Creativity | Curiosity | Judgement | Love of Learning | Perspective |
|---------------|------------------------|--------------|------------------------|---------------------|--------------|
| COURAGE | Bravery | Perseverance | Honesty | Zest | |
| HUMANITY | Love | Kindness | Social intelligence | | |
| JUSTICE | Teamwork | Fairness | Leadership | | |
| TEMPERANCE | Forgiveness | Humility | Prudence | Self regulation | |
| TRANSCENDENCE | Appreciation of beauty | Gratitude | Норе | Humour | Spirituality |

- 1. The most common strengths are kindness, gratitude, fairness and honesty
- 2. The least common strengths are self-regulation, prudence and modesty
- 3. The strengths most associated with happiness and well-being are love, hope, gratitude and zest

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Videos:

Neal Mayerson founder of the VIA Institute on Character speaks about the character strengths revolution. https://www.youtube.com/watch?v=fSmbB0Ko2hM

Ryan Niemiec Director of Education at VIA speaks about character strengths at a 2017 Ted talk https://www.youtube.com/watch?v=DMWck0mKGWc&t=351s

Books:

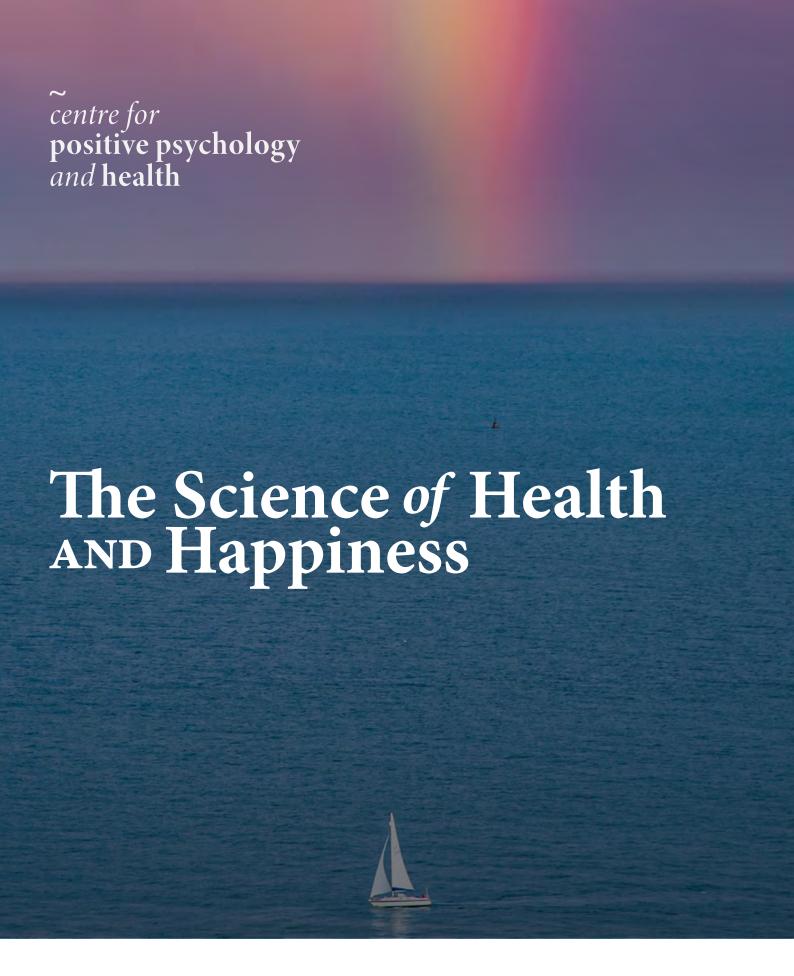
Popular

Niemiec R, McGrath RE (2019). *The Power of Character Strengths.* Cincinnati, The VIA Institute on Character

Technical

Petersen C, Seligman MEP (2004). *Character Strengths and Virtues A Handbook and Classification*. New York, Oxford University Press





LECTURE 9: HAPPINESS ACROSS THE LIFESPAN

Dr Trudy Meehan, Lecturer and Senior Clinical Psychologist

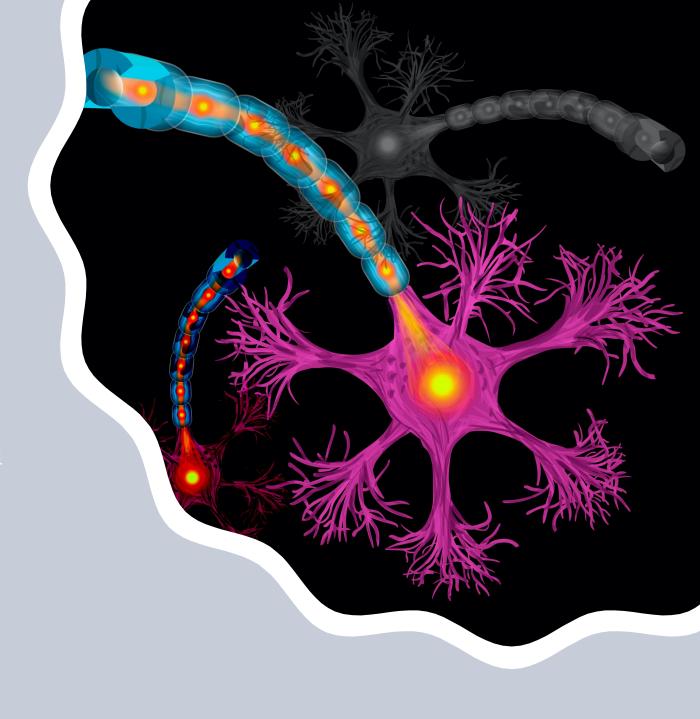
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- <u>Impact bias:</u> Our tendency to overestimate the emotional impact of any given event, including the intensity and duration
 - Brickman, Coates, Janoff-Bulman, 1978; Buehler &McFarland, 2001; Gilbert et al., 1998; Mellers & McGraw, 2001; Mitchell, Thompson, Peterson, Cronk, 1997; Rachman & Arntz, 1991; Schkade & Kahneman, 1997; Wilson, Wheatley, Meyers, Gilbert, Axsom, 2000; Wilson et al., 2000
- Immune Neglect: Our tendency to be unaware of the cognitive processes that help us buffer negative feelings such as rationalizing negative events. We have a cognitive immune system.
 - Gilbert et al., 1998, Wilson, Meyers, & Gilbert, 2003
- Focalism: Our tendency to focus too narrowly on the key event and fail to consider other occurrences that will impact on our emotions
 - Lam, Buehler, McFarland, Ross, Cheung, 2005; Schkade & Kahneman, 1998; Ubel, Loewenstein, & Jepson, 2005; Wilson et al. 2000



Neurons

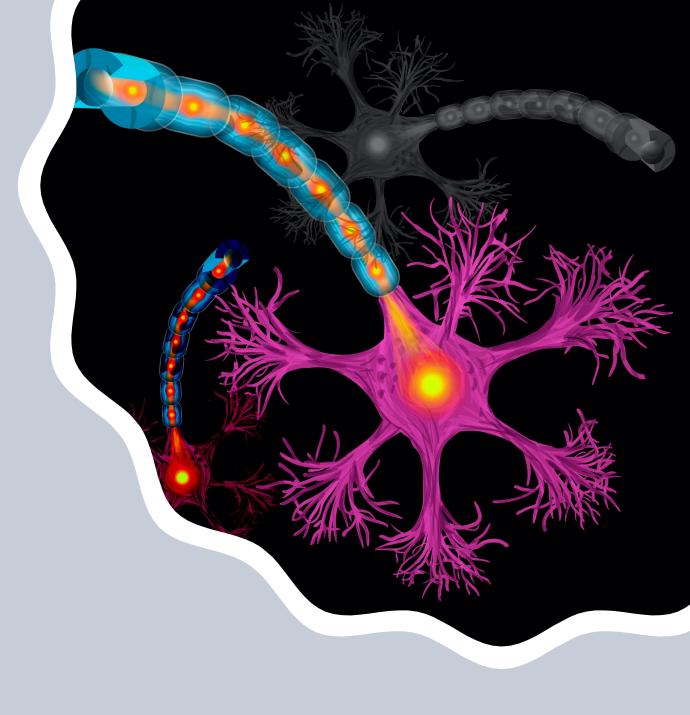
- Our brain has billions of nerve cells called "neurons"
- Neurons communicate through making connections with each other in a network
- The neurons connect with one another and with other cells in the body
- The pattern and strength of these neurons are the base of our knowledge and skills
- Research shows we have
 "neuroplasticity" the ability of the
 neurons in the brain to change and grow through learning.



Purpose and Meaning

- Purpose in life is linked to sustained ventral striatum activation. High levels of activity in the ventral striatum also predict lower levels of cortisol output.
- Studies suggest that purpose may have a neuroprotective effect on what is known as cognitive reserve.

 Researchers believe that people with more cognitive resilience ("cognitive reserve") at baseline are able to withstand more brain injury before developing neurologic symptoms (Boyle, Buchman, Barnes, & Bennett, 2010; Boyle et al., 2012; Hartanto et al., 2020)



Healing versus Cure as we age

- We want to feel a sense of continuity of self and our life (Atchley, 1999)
- We need to use compensatory strategies or be flexible to achieve this continuity as we age
- The use of compensatory strategies depends on one's willingness to accept alternative methods for accomplishing tasks.
- Also involves changing our definitions of success
 - Strawbridge et al. (2002) found that older adults who were experiencing chronic disease and declining functionality continued to view themselves as successfully aging and to enjoy well-being

Homework

- Reflect on things you love to do now
- Imagine things new things you might do (even badly...if something is worth doing it's worth doing badly to begin with)
- Remember things you loved to do when you were younger
- Be bold...design your life adventure
- Invite your children to join you and make mistakes together



Resources

Daniel Levitin – Successful Aging

• https://www.youtube.com/watch?v=jcx83Nc4dt4

Dan Gilbert – Synthesizing Happiness

• <a href="https://www.ted.com/talks/dan_gilbert_the_surprising_science_of_happiness?language=e] n#t-71113

Lisa Mosconi – How menopause affects the brain

• https://www.ted.com/talks/lisa_mosconi_how_menopause_affects_the_brain

Carl Honore – Why we should embrace aging as an adventure

• https://www.youtube.com/watch?v=jcx83Nc4dt4



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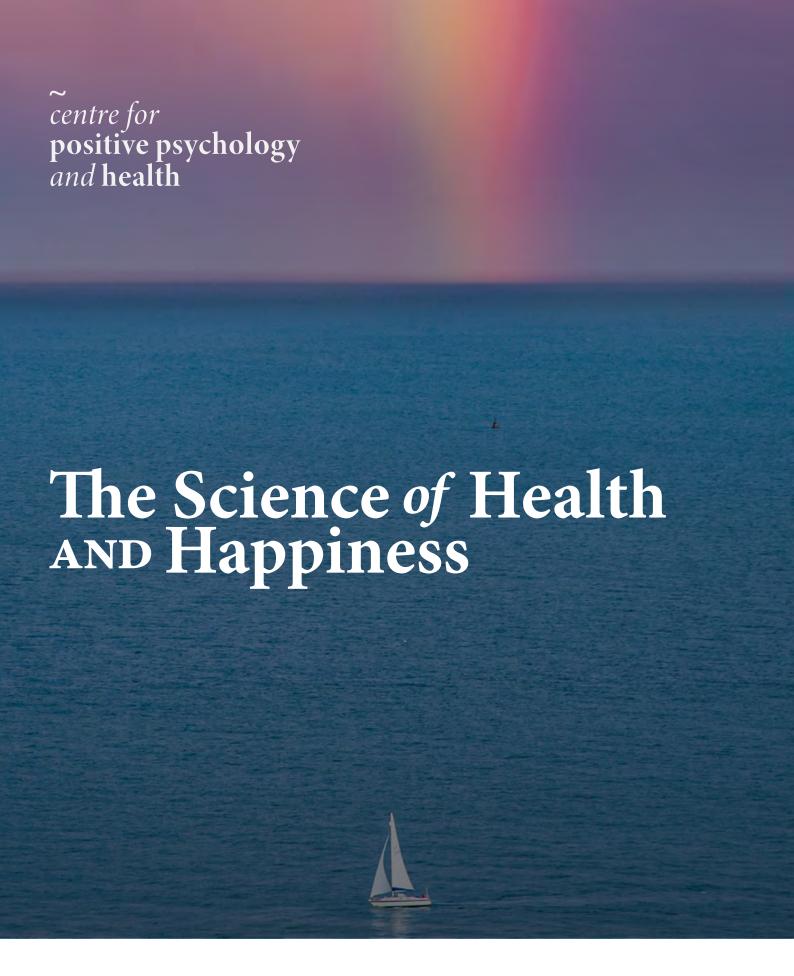
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LECTURE 10

Professor Ciaran O'Boyle Dr Pádraic Dunne Dr Trudy Meehan

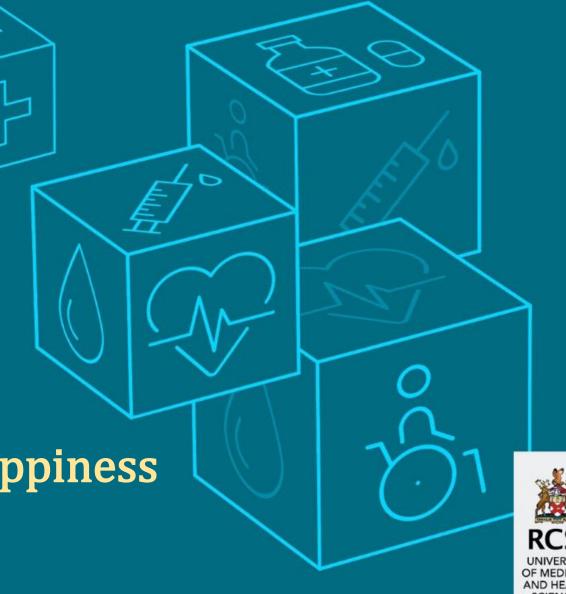
resource manual

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25,000 participants

Thank you for participating

The Science of Health and Happiness



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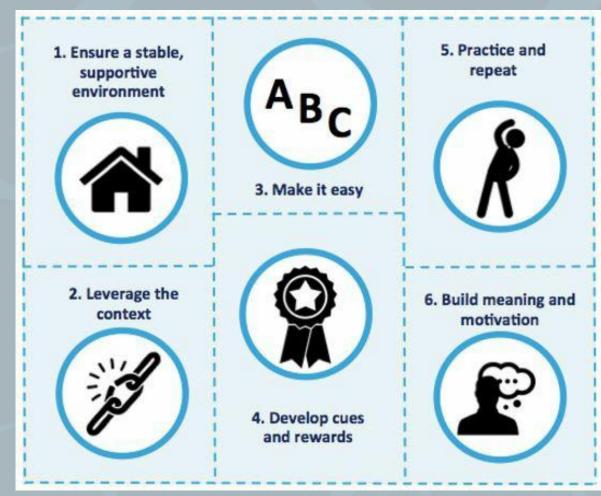
Making habits stick





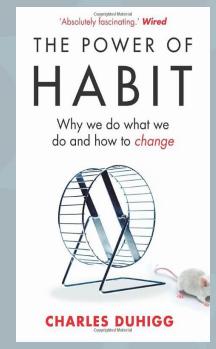
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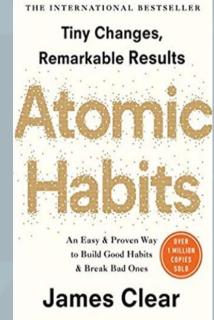
How to make sticky habits



It takes an average of **66 days** to generate a new habit

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



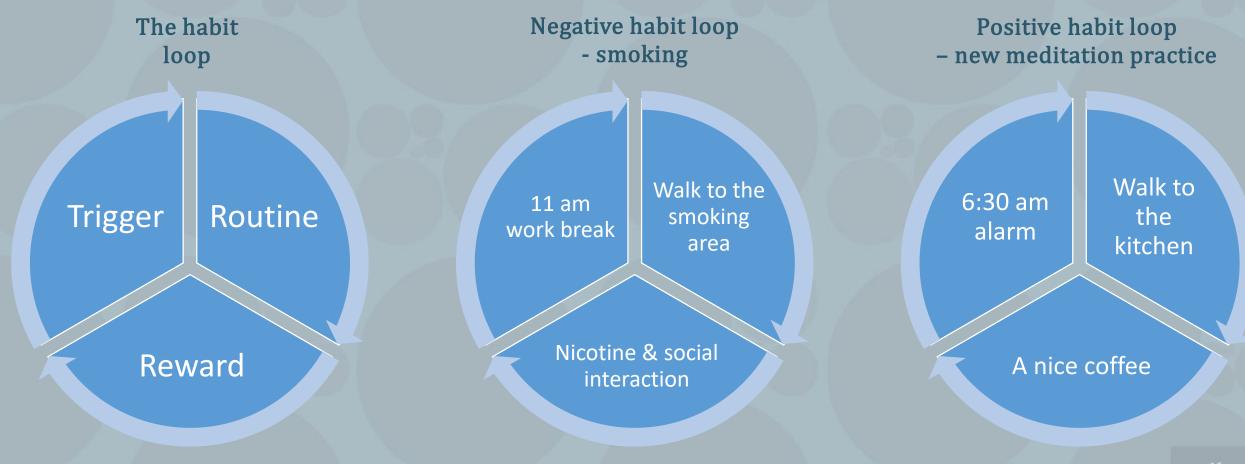




Neal & colleagues, Duke University: 6 essential strategies for habit - Adapted from thebearchitects.com

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The habit loop - develop triggers & rewards



Write down different habit loops for different times of the day, including the weekend and for different practices



The Behaviour Change Check-list

- Have you ensured or created a stable, supportive environment or context for your new habit?
- Are there any opportunities to leverage life changes or teachable moments? E.g. a global pandemic!
- Are there any opportunities to piggyback the new habit after existing habits and routines?
- Have you made the new behaviour as easy as possible to do?
- Have you created multiple habit loops to account for different eventualities?
- Have you ensured a mix of short-term and longer term rewards?
- Have you created opportunities to try out or practice the new behaviour?
- Have you attached new meaning(s) to attach to your desired habit?



Be self-compassionate

We all fall off the horse

Vow to start again the next day

So, where to next?

- The **Science of Health and Happiness** course will be available online at the RCSI until the 31st of August. In the next few weeks, we will provide the lecture notes in a single document.
- We need your help to improve the course so we will send you a **very** brief anonymous survey in a few weeks time we would be most grateful for your feedback.
- Our next **Science of Health and Happiness** course will launch in early September, and will focus on young people in school and college.
- Professor Martin Seligman, the founder of positive psychology, will be giving an RCSI MyHealth lecture on his life's work on the 1st of June – all welcome https://www.rcsi.com/dublin/news-and-events







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We wish you Health and Happiness