

Science of Happiness

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Disclaimer

Warning: Do not expect to be happy after this talk. Expecting to know everything about happiness in one hour is delusional and puts the speaker under undue and unrealistic pressure. Take whatever is relevant and throw away the rest. Listening to this talk could and might have serious effects on your finances, profession, relationships and sex life.

If you have attended this talk- feel free to facebook or just pretend that it's new and have a giggle or two 😊

- Why are you in this session?
- Why are you married/ partnered?
- Why are you in your profession?

We do things because we just want to be 'happy' (feel good and avoid pain/ suffering)

Message #1

- All of us want to be happy



Medical and Nursing students (n= 745)

Samaranayake Fernando Arroll et al 2013

DEPRESSION	12.8%	
ANXIETY	12.8%	(Females, Nursing)
ALCOHOL	14%	(Maori, PI)
DRUGS	8.2%	
SUICIDAL THOUGHTS	6.4%	

Though all of us want to be
happy, in reality, there is
**unhappiness and
dissatisfaction everywhere**

Positive Psychology and Affective Neuroscience



What makes me happy?

- Feeling secure, content, loved
- Cuddling while watching mindless reality TV show
- All Blacks winning world cup (again)
- Pay cheque
- Nice yumcha lunch with friends and family
- Bach solo cello suites
- Giving food to the homeless and being appreciated back

What makes you happy?

Circuitries for happiness



Calm
Contentment



Excitement
Drive



Connection
Compassion



Not so Calm and Content



Calm and Contentment circuitry

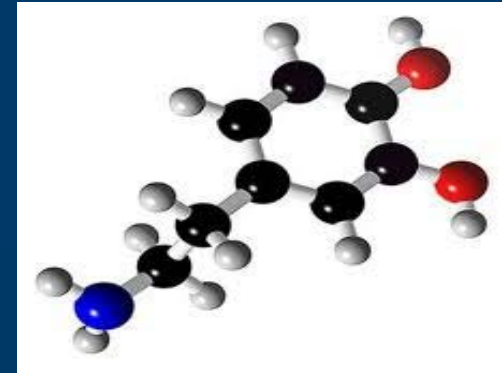
- Feeling calm, content and safe is CRUCIAL for happiness
- Neurotransmitters: GABA, serotonin, endogenous opioids
- Alcohol, THC, benzodiazepines, SSRIs as exogenous calming agents
- Mind training techniques as internal calming agents
- Brief effects but overall baseline can be reset!
- *Happiness is wanting what you have 😊*

Excitement Pleasure Circuit

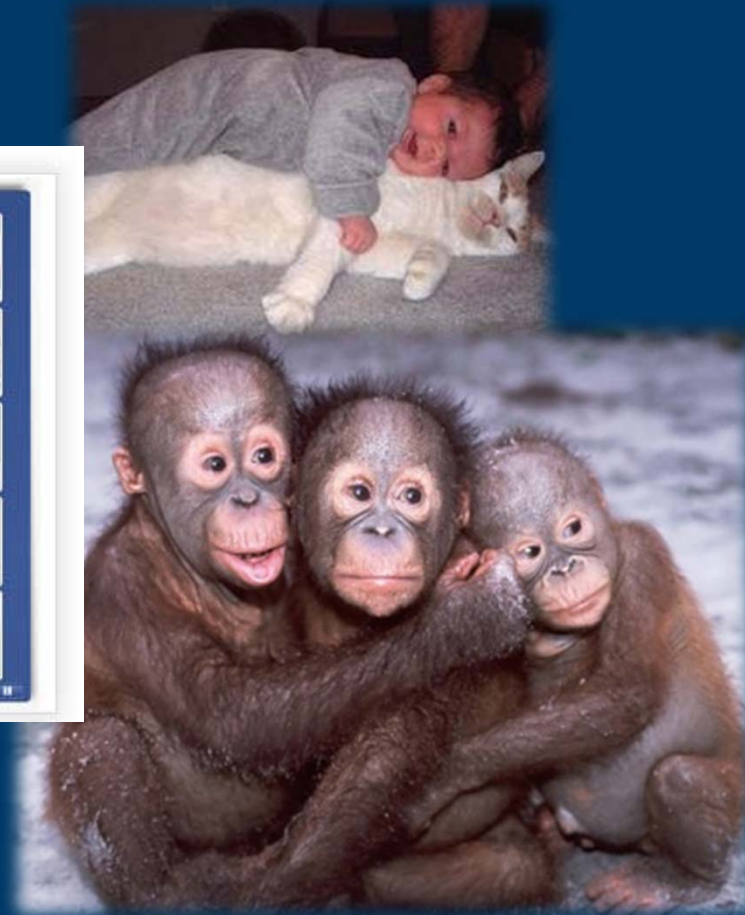


Excitement Pleasure circuit

- main neurotransmitter is Dopamine
- VTA projections to nucleus accumbens and prefrontal cortex
- arousal, motivation, reward, pleasure
- extremely powerful and addicting
- short term, unsustainable

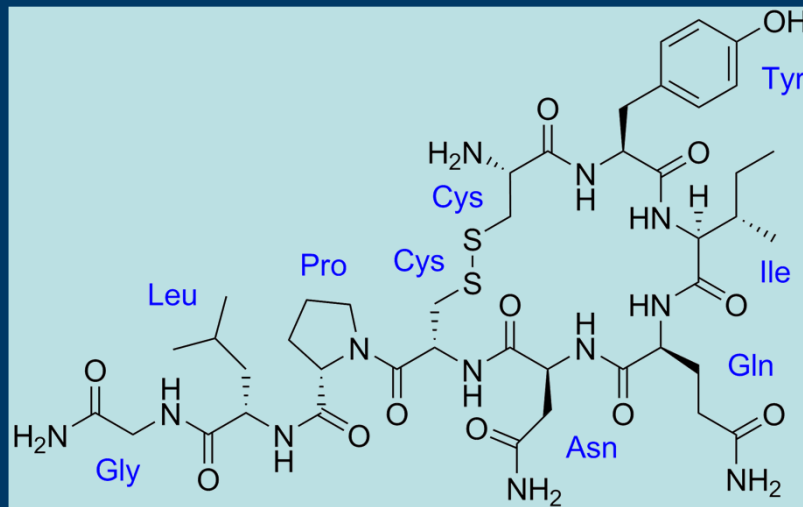


Connection Compassion circuit



Connection Compassion circuit

highest form of happiness
sustainable, internally reignited





THE UNIVERSITY
OF AUCKLAND

FACULTY OF MEDICAL
AND HEALTH SCIENCES



Message #1

- All of us want to be happy



Message #2



There are traps in our search
for happiness.

TRAP	ANTIDOTE
Desire to remove all the stressors	Accept reality and train the brain to handle stressors
Focus on external conditions like rank, appearance, possessions	Not sustainable; so change the focus
Expectation that good things will continue and life will go our way	Universal law of impermanence
Habituation and Pleasure Treadmill	Gratitude practices
Money	We only need so much to be happy. Harvard research on sharing versus focusing on self.
Powerful emotions	Mind training
In group versus Out group	Compassion

Emotions/ Feelings States

- Positive Emotions
 - Fleeting
 - Not sticky; easily forgotten
- Negative Emotions
 - Very powerful
 - stick like tar; “negativity bias”



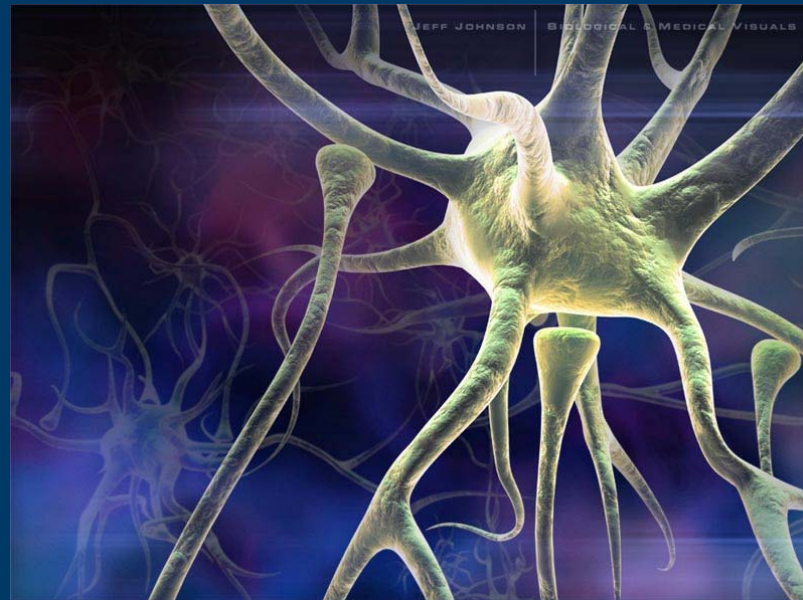
We are a sponge for negativity!



- Planning, reflection→
rumination
- Craving/ desire→
obsession to acquire

Message #2

There are traps (within our brain!) in our search for happiness.



The neural circuitry optimized for survival also causes unhappiness.

Message #3

- Brain is neuroplastic and can be trained to deal with the traps

Positive Psychology Interventions

- Mindfulness, living in the moment
- Gratitude
- Empathy and Compassion
- Self compassion
- Religion and Spirituality
- Dealing with negative thinking
- Better coping strategies
- Flow experiences
- Committing to goals
- Physical exercise
- Optimism
- Identifying and applying strengths

Mindfulness

Will allow us to see what's happening inside our brain

- What do we see?
 - most minds are:
 - wandering, easily distracted
 - very reactive, sweat small stuff (limbic hijack of prefrontal cortex)
 - prone to negativity
 - Default Mind Network (DMN)- wandering and unhappiness; living too much in our head

Mindfulness

- Continuous awareness of the present moment, accepting and without judgment
- Development of “mind’s eye”
- Not HIJACKED by negative thoughts/ emotions/ judgments
- Emotional fitness
- Awareness of the process and not going inside the story

- Enhanced through practice of Mindfulness Meditation- formal and informal

Mindfulness

- Benefits: (references can be provided on request)
- Better quality of life, subjective well being and mood, subjective health and sleep
- Lower stress, anxiety, depression, burnout, emotional exhaustion
- Less emotional reactivity
- Improved executive functioning, better attention, more situationally-appropriate decision making
- Less physician errors, improved connection with patients
- Better sustained immune reaction to influenza vaccinations
- Greater telomerase activity, longer telomeres
- Increased left sided anterior activation (PFC) and reduced limbic activity

Mindfulness Meditation

- iPhone App: Headspace, Smiling Minds, Mindfulness Mentalworkout
- Free online meditation guide:
calm.auckland.ac.nz
- Look for local groups

In AKL

Medical students and psychiatrist retreats
MBSR courses in Middlemore Hospital

Gratitude

- Turbo charger of happiness scores
- Easiest, most do-able
- Most popular
- Antidote to habituation
- Provides perspective

Gratitude exercises

Three good things exercise (Strath Haven High School
Positive Psychology Curriculum)

- 1) Write 3 good things that happened daily for a week
- 2) Why did this happen? What does it mean to you? How can you have more of this good thing in the future?

Gratitude Exercises

- For doctors
 - Remembering at the end of the day the people we have helped or patients who have improved/lessened suffering
- For teams
 - Good news stories before difficult cases reviewed

Empathy and Compassion

Connection and helping behaviour is in our genes



Empathy and Compassion

Experience

Empathy: recognizing another's emotional state

Compassion: wanting to alleviate suffering

Brain Imaging

 Inferior parietal cortex (understanding others)

 Dorsolateral PFC and communication with nucleus accumbens (emotion regulation and positive emotions)

Empathy and Compassion

From most if not all religious traditions:

Golden rule

"if you want to be happy, practice compassion"
HHDL

"true happiness consists in making others
happy"
Hindu proverb

"Love your neighbor as you love yourself"
Gospel of Luke

Empathy Compassion

- One of the highest and most sustainable sources of happiness
- *If disconnected- worst form of unhappiness*
- We are wired to feel good when we help (oxytocin surge)
- Even just thinking of past helpful behaviours make us feel good
- We sit on a goldmine of happiness

Empathy and Compassion

- How can you develop genuine kindness?
 - See everyone else (even other creatures) as similar to you
 - Recognize and remember that even the most annoying person (“out group”) just wants to be happy;
 - Truly understand the other person from their perspective
 - *“To be of highest benefit to all beings”*
- Mental Exercises to increase compassion:
 - calm.auckland.ac.nz (guided meditations)



Keeping the **motivation** alive on a daily or even hourly basis:

“May I be of benefit to my patients”

Self compassion (lack of)

Tendency to beat ourselves up

Perfectionism

Unforgiving stance



Self-compassion (self-compassion.org)



Kindness to
oneself

Common
humanity

Mindfulness

CALM - Computer Assisted Learning for the Mind



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- Homepage**
- Mental resilience**
- Managing stress, anxiety & depression**
- Healthy relationships**
- Finding meaning in life**
- NZ National Depression Initiative**
- Guided meditations**

Welcome to the **CALM** Website, Computer **A**ssisted **L**earning for the **M**ind.

All of us want to have a happy life. No one wakes up in the morning thinking "I hope I will be miserable today". Many of us think that happiness is dependent on external situations like possessions, status and pleasures. Though these things can be good, often the satisfaction they bring is short term.



Scientific studies on what makes people truly and genuinely happy show the importance of four main things:

1. **Mental resilience**
2. **Managing stress, anxiety and depression**
3. **Healthy relationships**
4. **Finding meaning in life**

Please take a moment to familiarise yourself with the content of at least the first two tabs below. Either click each tab individually, or use the **NEXT TAB** link:

Readings/ Resources

- www.calm.auckland.ac.nz
- Art of Happiness- Dalai Lama and Howard Cutler
- Compassionate Mind- Paul Gilbert
- How of Happiness- Sonja Lyubomirsky
- Positivity- Barbara Frederickson
- Happiness- Matthieu Ricard
- Peace is Every Step- Thich Nhat Hanh
- Inner Ape, Bonobo and Atheist, The Age of Empathy- Frans De Waal
- <http://www.authentic happiness.sas.upenn.edu> website on Positive Psychology
- self-compassion.org

Search for happiness

- Be smart
- Stop looking outward
- Focus inward

You can wake up now.
Talk over (and be happy) 😊

