

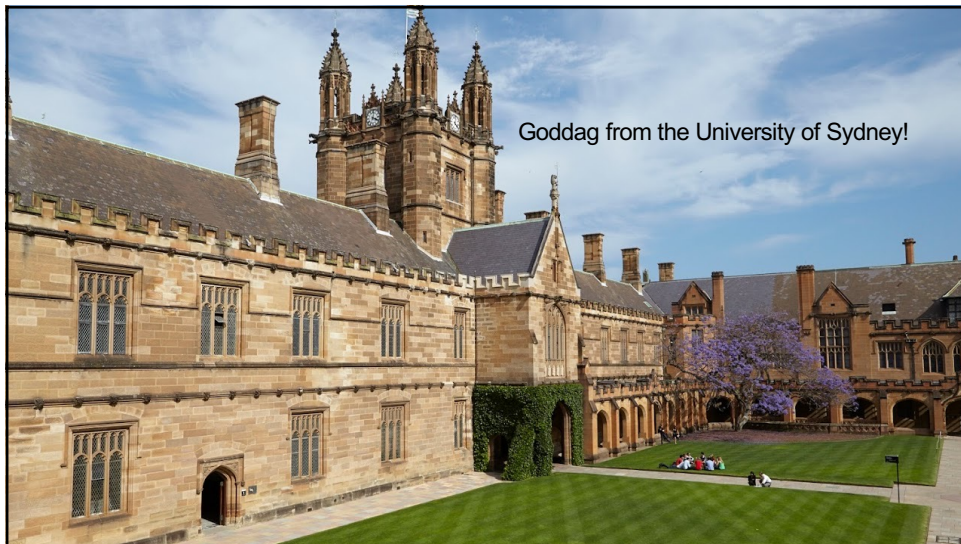
Rethinking coaching for peak performance:
What does “peak” really mean?

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Coaching Psychology Unit
School of Psychology



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We recognise and pay respect to the Elders and communities – past, present, and emerging – of the lands that the University of Sydney's campuses stand on. For thousands of years they have shared and exchanged knowledges across innumerable generations for the benefit of all.



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Coaching Psychology Unit @ USYD

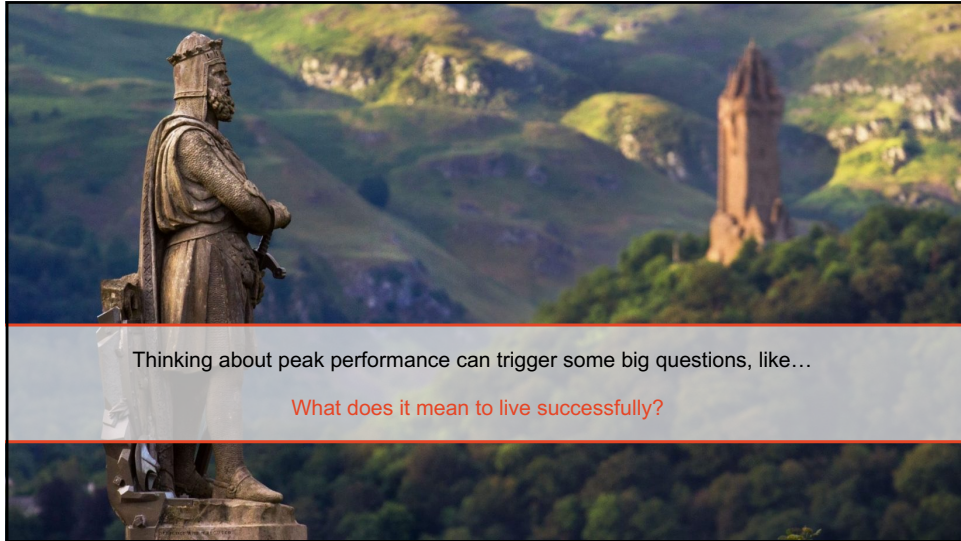


Meet the Team

Master of Science in Coaching Psychology

Unit of study	Credit points	A: Assumed knowledge P: Prerequisites C: Corequisites N: Prohibition
Core units		
PSYC421 Theories and Techniques of Coaching Psych	6	
PSYC422 Fundamentals of Coaching Practice	6	C PSYC421
PSYC423 Coaching Practice	6	P PSYC421 and PSYC422
Elective Units		
PSYC424 Social-Cognitive Issues in Coaching Psych	6	P PSYC421 and PSYC422
PSYC425 Positive Organisational Coaching	6	P PSYC421 and PSYC422
PSYC426 Groups, Teams and Systems	6	P PSYC421 and PSYC422 C PSYC423
PSYC429 Applied Positive Psychology	6	
PSYC428 Psychology of Peak Performance	6	

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PSYC4731: Psychology of Peak Performance

Day	Lecture & topics
Day 1	L.1 Introduction to the Psychology of Peak Performance L.2 Self-Determination Theory: A theory of optimal functioning L.3 Key conceptual models
Day 2	L.4 Getting to the zone: Ideal performance states L.5 Mental skills training I: Goal setting, self-talk & relaxation L.6 Mental skills training II: Imagery & concentration enhancement
Day 3	L.7 Working with the whole person I – Health pillars L.8 Working with the whole person II – More lifestyle pillars L.9 Practising resilience: Dealing with setbacks & burnout
Day 4	L.10 What makes a high performer? Attributes & characteristics L.11 High performers in context L.12 Group work with others: Peak performance in groups & teams
Day 5	Peak Performance project presentations Course review & exam preparation

Save the dates!

Angus Gardner
Monday 25th March, 7pm to 8pm

Dr Raffi Ossabian
Monday 15th April, 7pm to 8pm

Zoe McBride
Monday 6th May, 7pm to 8pm

* Not compulsory but worth attending!

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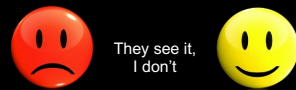
What constitutes a performance?

- Temporal urgency key to defining “performance”
- The need to activate one's skills & talents at a given point of time (Hayes & Brown, 2004)
- For it to be “peak”, it must in some way be more efficient, creative, productive, or better than typical performance
- According to Privette (1982), peak performance is the “full use of human power” (p. 1362)

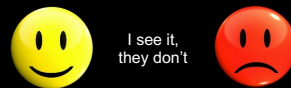


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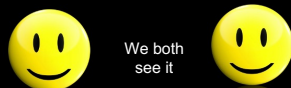
Peak performance can be tricky to detect!



They see it,
I don't



I see it,
they don't



We both
see it



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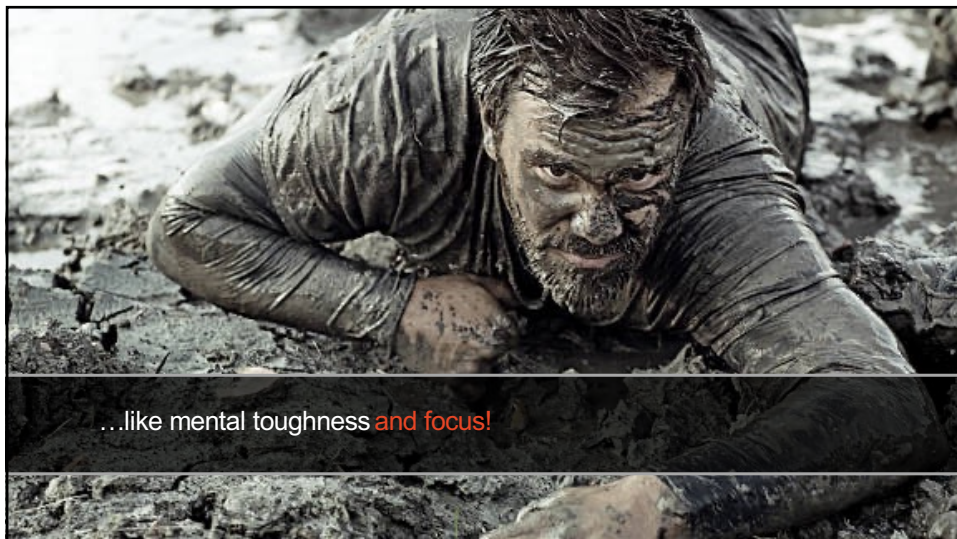
Sport & performance psychology

- PP often observed in sport & performing arts contexts & referred to as being “in the zone”
- Performance situations present a range of stressors
- In general, performers...
 - Are judged for their proficiency, against certain standards
 - Face consequences when things do not go well
 - Need good coping skills
 - Are more likely to succeed when they possess certain attributes (such as confidence, sense of purpose, commitment...)

SOURCE: Hayes & Brown (2004)



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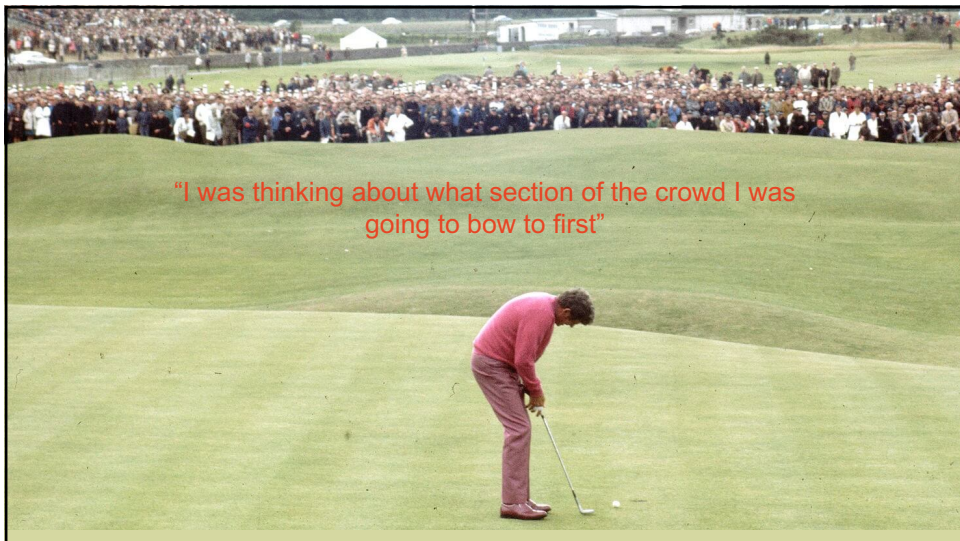
A quick story...

July 1970



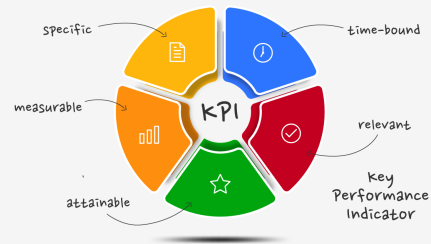
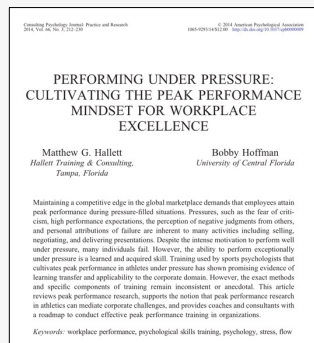
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"I was thinking about what section of the crowd I was going to bow to first"



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A popular idea...



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In general...

- “Performance” tends to be thought of in one-dimensional terms
- Based on gains made by individuals at the level of behaviour
 - How much?
 - How quick?
 - How often?
 - How accurately?



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Coaching for “peak” performance

Seeks to facilitate demonstrations of excellence & the accomplishment of remarkable things

However, is that all we need to be concerned about?

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What is the effect of performance on performers?

- Spence & Deci (2013) argue that focusing on “what people can do and how well they can do it will yield an incomplete picture of their overall status” (p.87)
- As such, it is important to keep a performer’s overall status in mind because they cannot be reasonably separated from their accomplishments



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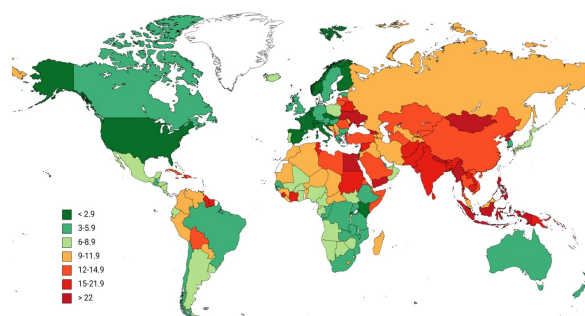
Some questions

- How does performance effect the performer?
- Does it leave them feeling...
 - enlivened or dispirited?
 - enhanced or diminished?
 - flourishing or languishing?



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Occupational burden of disease & “karoshi”



Deaths due to long working hours
per 100,000 people (age 15+)

SOURCE: Joint estimates of work-related burden of disease and injury, 2000-2016: Global monitoring report: Geneva: WHO & ILO (2021)



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More questions

- Can performance be considered **peak** if its beneficial real-world effects are not matched by pleasant subjective effects?
- If not, shouldn't coaching help performers to seek both?

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Mental skills training (Part I)
Goal-setting, self-talk & relaxation
Lecture 5 (Day 2)

1) Goal setting

- Goals are "internal representations of desired states" (Austin & Vancouver, 1999)
- Substantial literature exists on how to set & strive towards goals
- Early research focused on various goal attributes (e.g. goal difficulty, specificity, abstraction) & how people pursued goals (largely focused on work performance & education)
- Extensively used in sport because...

2) Self talk

- Umbrella term for techniques aimed at reducing the negative consequences of disruptive & anxiety-producing cognitions
- Common techniques include:
 - Thought-stopping
 - Trigger words
 - Cognitive restructuring
 - Retraiming

3) Relaxation

- Many problems in performance stem from the anxiety & muscle tension that accompany being "on stage"
- States of high arousal tend to be incompatible with performing skills that require motor control
- Numerous methods have evolved to induce states of relaxation
- Aim to **reduce sympathetic nervous system activation** & **increase parasympathetic activity**

4) Concentration enhancement

Concentration training

- Practice exercises intended for use in performance training sessions
- Includes concentration exercises (e.g. concentration grid, attention training), simulation training & mindfulness training

Concentration techniques

- **Techniques designed for performance situations** include imagery

5) Imagery & visualisation


- "Using all the senses to create or recreate an experience in the mind" (Weatly & Greenleaf, 2001)
- Utilises the mind's capacity to simulate experiences
- The interpretation of information stored in memory rather than the interpretation of sensory inputs (i.e., perception)
- Based on principle of functional equivalence: The same neurophysiological processes underlie imagery & actual movement (Sollfrank et al., 2015)
- As such, visualisations are used to train mind & body
- Use in sport increased rapidly after 1984 Olympics, after many athletes reported positive impacts (Prebou et al., 2020)

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Fluctuating fortunes: Dealing with setbacks & success

Lecture 9 (Day 3)

Dr Gordon Spence
University of Exeter



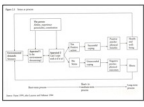
Two sides of the performance coin

- In an achievement-oriented society, success & failure can have powerful effects on individuals
- Success can lead to heightened estimations of competence, positive feelings (e.g. happiness, pride), increased self-esteem & enhanced motivation for performance tasks
- Failure can lead to feelings of incompetence, powerlessness, negative feelings (e.g. shame, sadness), low self-esteem & reduced enthusiasm for performance tasks

• Both to mar

Coping

- Constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands appraised as taxing or exceeding the resources of a person (Lazarus & Folkman, 1984, p. 141)
- The need to cope emerges from an exchange between the person & their environment
- Also the transactional model of stress



Coping & musical performance

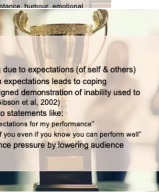
- Stress for musicians is time & place specific, so it can be anticipated & coping strategies employed
- However, music performance is a high-strain job
- E.g., orchestral musicians have little autonomy (highly trained followers) & high psychological demands (flawless performance expected)
- Stress can manifest itself in many ways...

Coping & healthcare

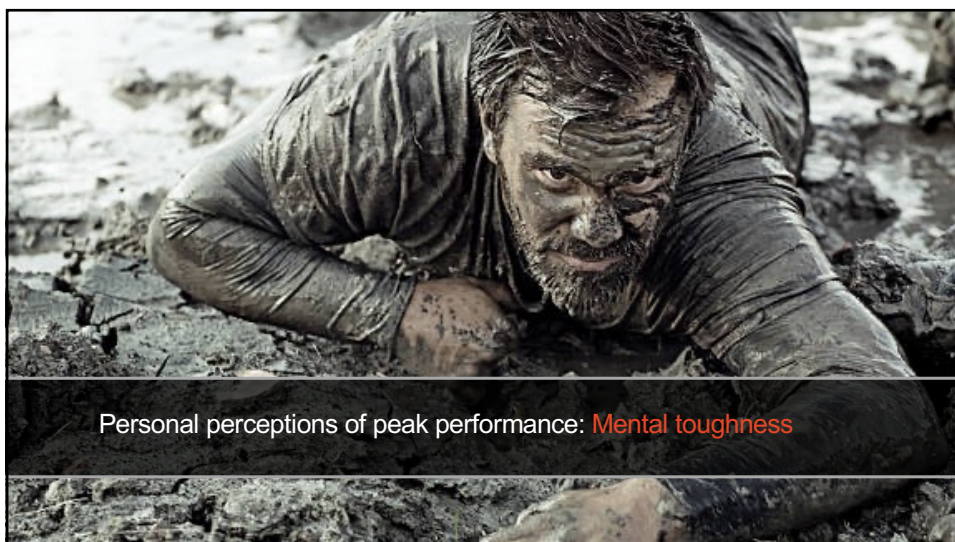
- Health care providers have long experienced a range of work stressors (e.g., long hours, exposure to infections) that were intensified by COVID-19
- Marbouty Lou et al (2021) found that levels of distress & burnout amongst nurses & physicians were greater during COVID than before
- Investigated effect of coping strategies on relationship between stress & burnout by distinguishing between:
 - Adaptive coping – use of resources, problem-solving, acceptance, humour, emotional & instrumental
 - Maladaptive coping

Sandbagging

- Being the "favourite" can be daunting due to expectations (of self & others)
- Any perceived inability to handle high expectations leads to coping
- Sandbagging is "the false claim or feigned demonstration of inability used to create artificially low expectations" (Cobain et al, 2002)
- High sandbaggers respond strongly to statements like:
 - "It's important I surpass people's expectations for my performance"
 - "It's better for people to expect less of you even if you know you can perform well"
- Sandbaggers try to reduce performance pressure by lowering audience expectations.



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Mental toughness as a rigid personal construct...

"Take a spoonful of cement & harden up!"



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How you define things matters

A collection of values, attitudes, behaviours and emotions that enable an individual to persevere and overcome any obstacle, adversity or pressure experienced...

but also, to maintain concentration and motivation when things are going well...

to consistently produce high levels of performance

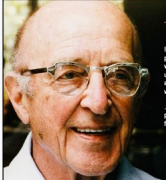
Gucciardi & Gordon (2008)

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...and psychological flexibility & autonomy support

Integrative Model of Human Performance (IMHP)

- Gardner & Moore (2007)
- Originally a model of processes by which athletes attain & maintain optimal performance states
- Expanded to other high performance domains
- Unlike other models the IMHP considers a myriad of factors:
 - Skills & abilities (physical, sensorimotor, cognitive)
 - Environmental demands
 - Dispositional characteristics
 - Self-regulatory processes




Thus, spoke Carl Rogers

If individuals "experience only unconditional positive regard, that is, a congruence of worth would emerge, self-regard would be unconditional, the needs for positive regard and self-regard would never be at variance with organismic valuation...and the individual would continue to be psychologically adjusted and would be fully functioning." Rogers (1959, p.224)

Getting out of your own way

- The IMHP highlights a theoretical need to reduce susceptibility to psychological disturbances before, during & after performance
- Led to the development of the mindfulness-acceptance-commitment (MAC) approach to performance enhancement
- Develops skills & capacities that can be applied during any phase of the IMHP
- Informed by Acceptance & Commitment Therapy (ACT)



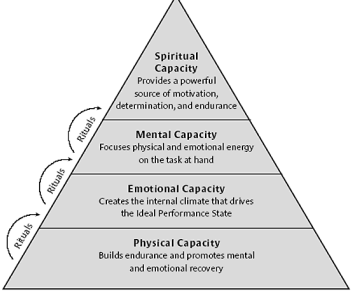
The Importance of Goal Management in Adaptive Self-Regulation: When Getting Up is Beneficial

CAROLAN WILCOX
 Colorado State University, Fort Collins, Colorado
 MICHAEL P. SCHNEIDER
 Oregon Health University, Portland, Pennsylvania, USA
 CHARLES E. CARVER
 University of Texas, Colorado Springs, USA
 RICHARD STOUT
 University of Kentucky, Lexington, Pennsylvania, USA

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Energy management

- "The enemy of high performance is the absence of intermittent recovery"
- Need to balance energy expenditure with energy renewal
- Rituals & routines create oscillations that restore energy at 4 levels




SOURCE: Loehr & Schwartz (2001)



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Dealing with the whole person (Part I):
Lifestyle pillars
Lecture 7 (Day 3)
Dr Gordon Spence
Creating Psychology Unit
Glasgow

The anti-ageing effects of PA



PA, physical fitness & burnout susceptibility

- Leisure-time PA can also enhance:
 - Autonomy - as people can choose what they do
 - Mastery - via achievement in physical challenges
 - Psychological detachment - via mental separation from work
 - Relaxation - down-regulates the sympathetic nervous system
- However, there is a difference between being PA & being physically fit
- People who build fitness through PA may gain an additional buffer to burnout beyond its psychological gains
- Physiological gains, like better blood oxygenation & ATP production, should increase the feeling of bodily energy & decrease feelings of fatigue

SOURCE: Geater et al (2021)

High fat diets don't help us think!

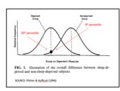
- Studies investigating the effect of high fat diets (i.e. ~75% of energy intake) report negative effects for:
 - Attention, speed of retrieval & depressed mood in healthy, young adult males - after 5 days (Hollaway et al., 2011)
 - Reaction times & attention in low-actively males - after 7 days (Edwards et al., 2011)

Nutrition & Hydration

- Dehydration occurs when normal water volume drops by as little as 2% (Panasick & Thomas, 2016)
- Given thirst sensations decline with age (Begg, 2017), many older adults may operate in a state of chronic, mild dehydration
- Associated with many negative effects...
 - Thermoregulation - for each 1% of water lost, core body temperature ↑ 0.15 to 0.20 degrees
 - Reduced physical performance - sluggishness
 - Me
 - Mo

Sleep & performance

- Pitcher & Huffcutt (1996) - meta-analysis focused on effects of sleep deprivation on performance
- 19 studies & 143 experimental results (n=1,932)
- Results coded in terms of level of:
 - sleep deprivation
 - type of effect (cognitive, motor, mood)
 - type of task (simple/complex)
 - task duration (short/long)






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Working with the whole person (Part II)
More lifestyle pillars
Lecture 8 (Day 3)
Dr Gordon Spence
Creating Psychology Unit
Glasgow

Rest & recovery (stress management)

- The influence of the natural world on psychological well-being, physical health & human functioning is well established
- Exposure to natural settings positively impact attentional control, physical recovery & wellbeing, more than unnatural settings (e.g. Tennesen & Cimprich, 1995).


Telepresseure & psychological detachment from work

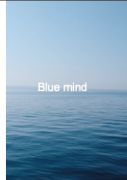
Attention Restoration Theory (Kaplan, 1995)

- Why are natural environments beneficial to human beings?
- ART explains the therapeutics of natural environments via an information processing (cognitive) perspective
- According to ART, nature is not just rewarding - it evokes attentional processes that are largely involuntary & provide a rest from the prolonged or intensive use of directed attention
- It creates oscillations!


Green mind



Blue mind

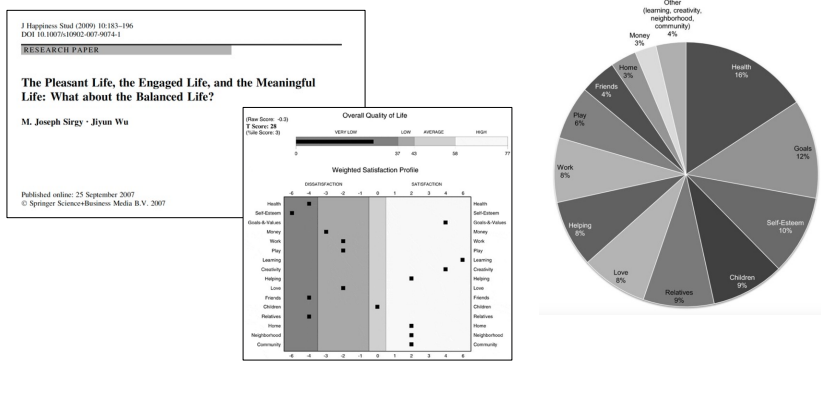


Does waterfall aerosol influence mucosal immunity and chronic stress? A randomized controlled clinical trial



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A balanced “performance mix”



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What does “peak” really mean?

- High performance associated with beneficial effects for others (e.g., team, school, organisation) AND the performer
- A form of optimal functioning...*doing well & feeling good*
- Supported by purposeful effort to balance energy expenditure & energy renewal across multiple dimensions (i.e., physical, emotional, cognitive & spiritual)
- Coaches are uniquely placed to facilitate the development of a “performance mix” that can support such outcomes

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Thanks for listening

Questions?

