



# Mental Rest and Recovery

October 15<sup>th</sup>, 2019

dr. Yannick Balk

## Who am I?

- ▶ Elite youth athlete (long time ago...)
- ▶ Researcher
- ▶ Performance psychologist
  - ▶ 1-on-1
  - ▶ Groups/organizations



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## Food for thought: Einstein

$$a = x + y + z$$

“If A equals success,  
then the formula  
is A equals X  
plus Y and Z,  
with X being  
work, Y play,  
and Z keeping  
your mouth  
shut.”

Albert Einstein



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## Societal changes



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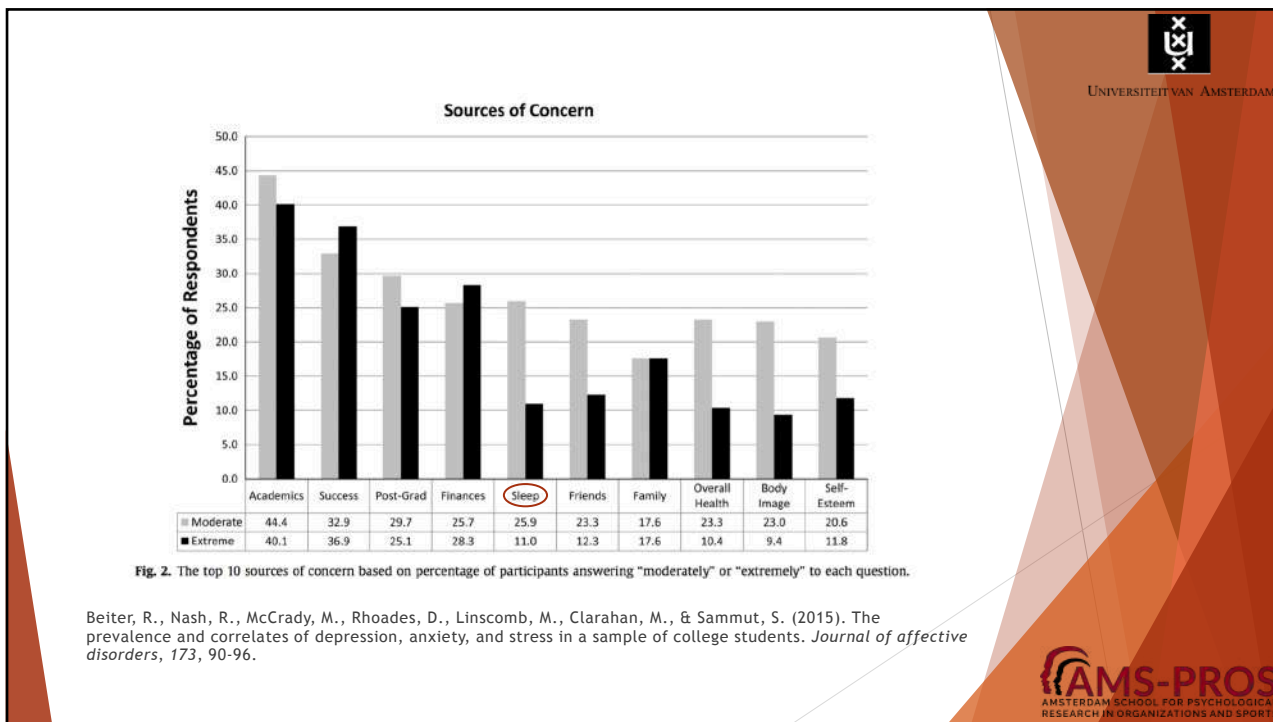
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## Societal changes



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Stress and fatigue are *no big deal* as long as you can balance it with *adequate recovery*



## Recovery

- ▶ Studying can be stressful and requires physical and mental effort
- ▶ Einstein: Hard work ('A') should be balanced with play/recovery ('Y')
  - ▶ Supported by recent research 😊
- ▶ **Complete** recovery is only accomplished when physical and mental 'batteries' are replenished

$$a = x + y + z$$



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## What is recovery?

- ▶ Physical/physiological
- ▶ Psychological
  - ▶ Thoughts ] 'mental'
  - ▶ Emotions ]
  - ▶ Behaviour ]
- ▶ **Adequate** recovery depends on getting a break from demands
  - ▶ Cognitive Activation Theory of Stress (CATS; Ursin & Eriksen, 2010)
  - ▶ Allostatic Load Theory (McEwen, 1998)



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## Important aspects related to recovery

- ▶ Recovery is specific to the individual and depends on individual preferences
  - ▶ Recovery experiences



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## Recovery Experiences Model



Cropley & Quersted, 2012; Newman, Tay,  
& Diener, 2014; Sonnentag & Fritz, 2007



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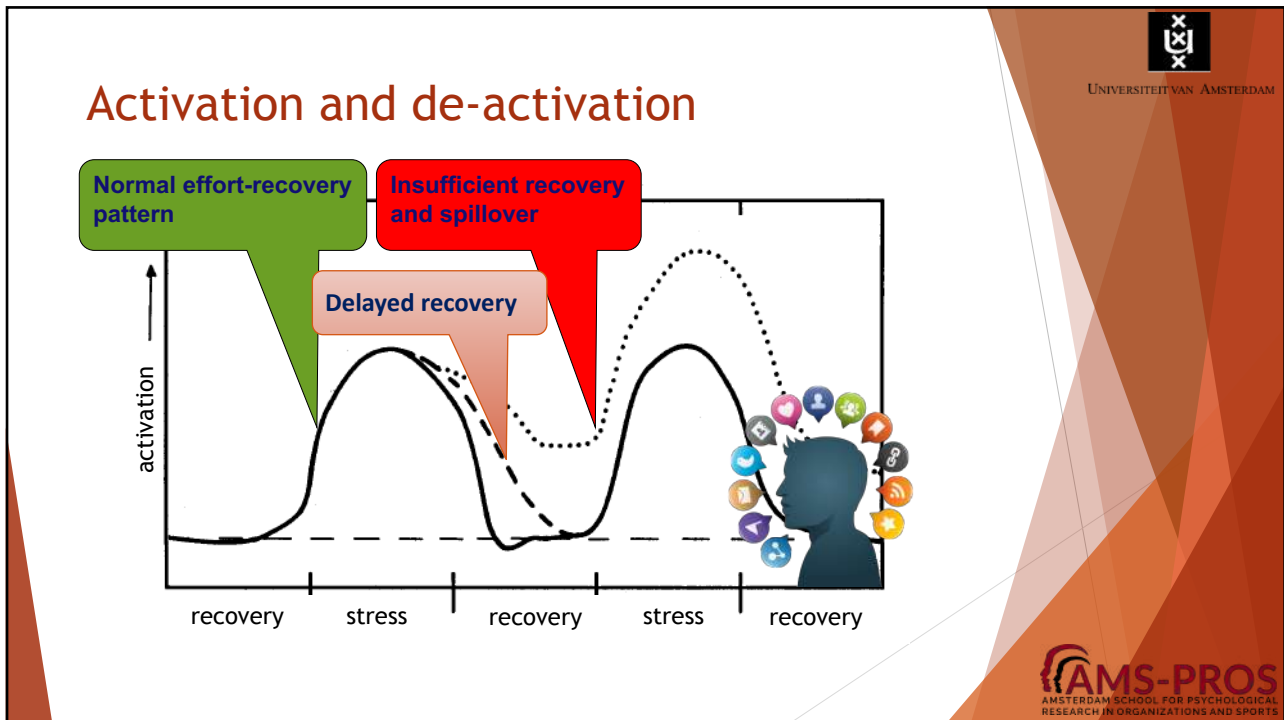
## Detachment

- ▶ Recharging batteries by 'switching off' from study-related matters
  - ▶ Focus on things other than studying (cognitive detachment)
  - ▶ Put aside study-related emotions (emotional detachment)
- ▶ Provides a 'break' of mental (and physiological) activation



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## Spill-over effects

- ▶ Overreactivity
- ▶ Prolonged activation of psychophysiological systems
  - ▶ (nor)adrenaline
  - ▶ cortisol
- ▶ Slow 'unwinding' (adrenaline levels remain high)
- ▶ Risk behaviour (e.g. alcohol use, medication, smoking)

↓

- ▶ Sleep problems (as a consequence)

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## Detachment

- ▶ Recharging batteries by 'switching off' from work-related matters
  - ▶ Focus on things other than work (cognitive detachment)
  - ▶ Put aside work-related emotions (emotional detachment)
- ▶ Provides a 'break' of mental (and physiological) activation
- ▶ Motivational aspect: willingness to expend new effort



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## Motivational aspect

I don't want to liken this to a regular day job, but it relates a bit to someone who goes to the office and when they go home they'd rather not talk about work. Obviously this is different. I'm doing what I love for a living and I'm incredibly fortunate to be able to do this. I never, ever take a day for granted. But mentally it can wear on you, so it is good to get away for a bit. That way when I come to the rink I'm so excited about it, so excited to get here.

*Jason Garrison*



"It's good to take a break from it every year so that when I start again, I'm excited to get going and push myself once more."

*Vicky Holland - GB Olympic triathlete*



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## Mental relaxation

- ▶ After mental effort, resting involves giving your brain a break from thinking hard
- ▶ Low-effort and fun activities provide an allow for mental rest
- ▶ A relaxed state benefits sleep

Use NHL star P.K. Subban's mental checklist to start your day right. "Everyone needs a break once in a while. Sometimes I just want to be in a room by myself, not even have the TV on."



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## Recovery reflection



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Question to ask yourself	Why is this question relevant to helping you rest mentally?	What can you do to achieve this resting experience?
Do you have a "switching-off" plan?	Resting involves "switching off" from constantly thinking about your studies. Therefore, a key resting experience involves spending time thinking about something other than your studies for a while.	Have you planned to spend some time: (a) with people who are not your classmates? (b) in venues that do not include your teaching facilities and where you cannot see your textbooks, laptop, etc?

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Have you arranged a "quiet zone"?	Resting involves giving your brain a break from thinking hard. Therefore, a key resting experience involves "doing not much slowly".	Have you planned to spend time: (a) alone or with close friends or family with whom you can be yourself? (b) doing activities that are fun and mean you do not need to think very hard (e.g., a favorite TV show)? (c) in a relaxed venue (e.g., bed, room, home, café) with few distractions?

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Have you scheduled your "me time"?	Resting involves giving you a break from having your day structured and scheduled by someone or something else. Therefore, a key resting experience involves deciding what you want do (or not do) and exactly when, where, and for how long you want to do it (or not do it).	Have you planned to spend some time: (a) doing exactly what you want, where you don't need to consider others' needs? (b) when you can indulge the real you? (c) when it's just fine to feel that you are doing nothing "useful" at all?



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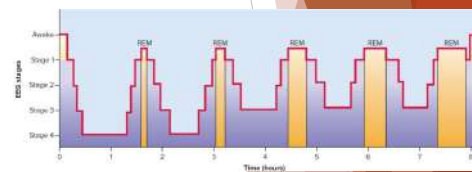


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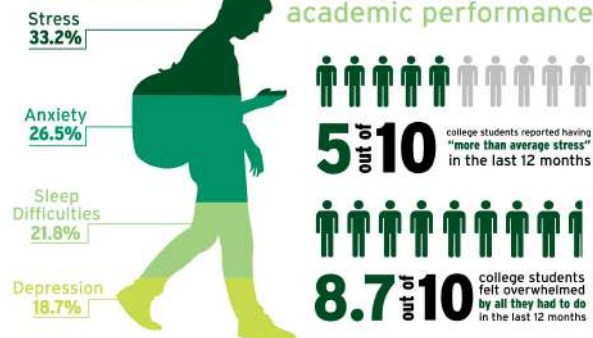
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## Sleep

- ▶ Approximately every 90 min during a night of normal sleep, the brain oscillates between two main sleep stages: nonrapid eye movement sleep (NREM) and rapid eye movement sleep (REM)
- ▶ Stages 3 and 4 are deep sleep (slow wave sleep, SWS)
  - ▶ Growth hormone secretion is the highest during SWS which importantly aids in neural and cellular restoration (Birzniece et al., 2011)
- ▶ Following progression through each of the four NREM sleep stages, a period of REM sleep occurs
  - ▶ Critical for memory consolidation



## SLEEP is the THIRD LARGEST FACTOR affecting college student's academic performance



© Collegian.com

- ▶ A longitudinal study tracking Canadian university students from 2005 to 2009 found a strong link between later bedtime and lower grade point averages
  - ▶ "A 14-min average delay in bedtime translated into a one letter-grade drop"

## Stress (or lack of recovery) and sleep

- ▶ One of the most important predictors of poor sleep is **stress**
  - ▶ High arousal and displeasure
  - ▶ Emotional and academic stress have a negative impact on sleep, resulting in fewer hours of sleep, more sleep disturbances, and later rise times
- ▶ Stress disrupts sleep by producing physiological arousal and heightened emotional activation
- ▶ Research by Amaral and colleagues (2018) showed that negative affect mediated the association between college students' stress and sleep difficulties



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## Sleep recommendations

- ▶ Think in cycles of 90 minutes
  - ▶ approx. 5 cycles per night, 35 per week
- ▶ Keep a regular wake-sleep pattern
- ▶ **Create a relax-routine to unwind before going to bed**
  - ▶ Write things down (keep a journal)
  - ▶ Read
  - ▶ Listen to music
- ▶ Improve sleep hygiene
  - ▶ Cool and dark room, blue light filter, shower
  - ▶ Minimize caffeine and alcohol intake (< 4 hours before sleep)
- ▶ Take a powernap during the day
  - ▶ 20-30 minutes

Room for  
improvement?



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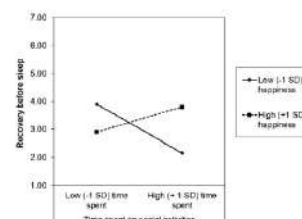
## Recovery Experiences Model



Cropley & Quersted, 2012; Newman, Tay, & Diener, 2014; Sonnentag & Fritz, 2007

## Important aspects related to recovery

- ▶ Recovery is specific to the individual and depends on individual preferences
  - ▶ Recovery experiences
  - ▶ Subjective experience important aspect (Oerlemans et al., 2014)
- ▶ **Doing nothing** does not always equal *recovery* (!)



## Recommendations

$$a = x + y + z$$

- ▶ Work *smart*, not hard (energy management)
  - ▶ Plan sufficient time for rest and recovery (work and play!)
- ▶ Monitor yourself (keep a journal)
- ▶ Critically reflect on your sleep hygiene
- ▶ Seek resources when necessary (personal development, coaching)



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## Taking care of yourself: Recharge your batteries



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## Practice



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### NEC runs 'punishment laps' after being kicked out of the League Cup

The elimination from the cup tournament has resulted in a punishment training for the selection of NEC. In addition, their day off was withdrawn by trainer Ernest Faber.



### Younes asks in vain for vacation

"Because of the Confederations Cup I did not have a good holiday and that is why I asked Ajax to be able to leave for a while. The answer was "no", while partly due to the dramatic news about Nouri in the summer, I was unable to detach from football. I wanted to be with my teammates and therefore came back earlier."

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## We need a law?



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### *France Lets Workers Turn Off, Tune Out and Live Life*

By **Alissa J. Rubin**

Jan. 2, 2017



A new French law establishing workers' "right to disconnect" [goes into effect today](#). The law requires companies with more than 50 employees to establish hours when staff should not send or answer emails. The goals of the law include making sure employees are fairly paid for work, and preventing burnout by protecting private time.

French legislator Benoit Hamon, [speaking to the BBC](#), described the law as an answer to the travails of employees who "leave the office, but they do not leave their work. They remain attached by a kind of electronic leash—like a dog."

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## What will the future bring?



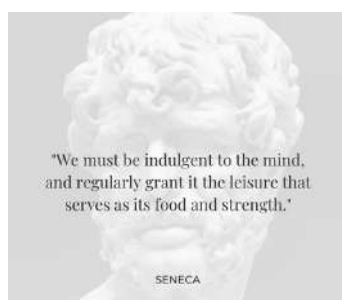
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## Thank you for your attention!



Contact:

[y.a.balk@uva.nl](mailto:y.a.balk@uva.nl)

 [@yannickbalk](https://twitter.com/yannickbalk)



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