



SLEEPLESS @ KU LEUVEN

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Background

Impaired sleep is a frequent and important health problem in college students

- Prevalence rates
 - Up to 60% report bad sleep quality
 - 14,9% report sleep onset insomnia
 - 25,9% report sleep maintenance problems
 - 7,7% fulfill ICSD-II criteria for insomnia
- Daytime consequences
 - Fatigue
 - Concentration
 - Memory
 - Mood

Lund et al., 2010; Schlarb et al. 2012

Background

Serious impact on academic performance

- reduced neurocognitive functioning
- lower academic performance
- more stimulant use

Serious impact on general quality of life

- more health risk behaviours
- lower life satisfaction
- higher risk for mental health problems, lower self-efficacy and suicidal ideation

Friedrich, A. & Schlarb, A. (2017)

Not only sleep *disorders* but even sleep *problems* and *reduced sleep duration* impair college students' lives and their academic career significantly!

Background

Why are college students a vulnerable population regarding sleep?

→ life is filled with challenges in all areas

- living arrangements
- social life
- biological developments
- more responsibilities

Aims

- to illustrate the two-stepped care model at KU Leuven
- to briefly overview the key components of CBT-I
- to discuss the effectiveness of psychological interventions

Two-stepped care model at KU Leuven

- Start to Sleep: the basics
- Start to Sleep: the training

START to SLEEP: THE BASICS

- What?
 - psycho-education on normal sleep, sleep pathologies, sleep hygiene, **sleep medication**,...
- For whom?
 - everybody with a need on information on sleep
- Why?
 - high prevalence of sleep disturbances
 - good sleep hygiene can make a difference
 - preventive aspect
- How?
 - evening sessions
 - ex cathedra lectures
 - large groups



START to SLEEP: THE TRAINING

- What?
 - cognitive behavioral therapy for insomnia (CBT-I)
- For whom?
 - chronic insomnia
- Why?
 - large body of scientific evidence
- How?
 - group (up to 8 students)
 - 6 sessions
 - 2 hours
 - weekly basis

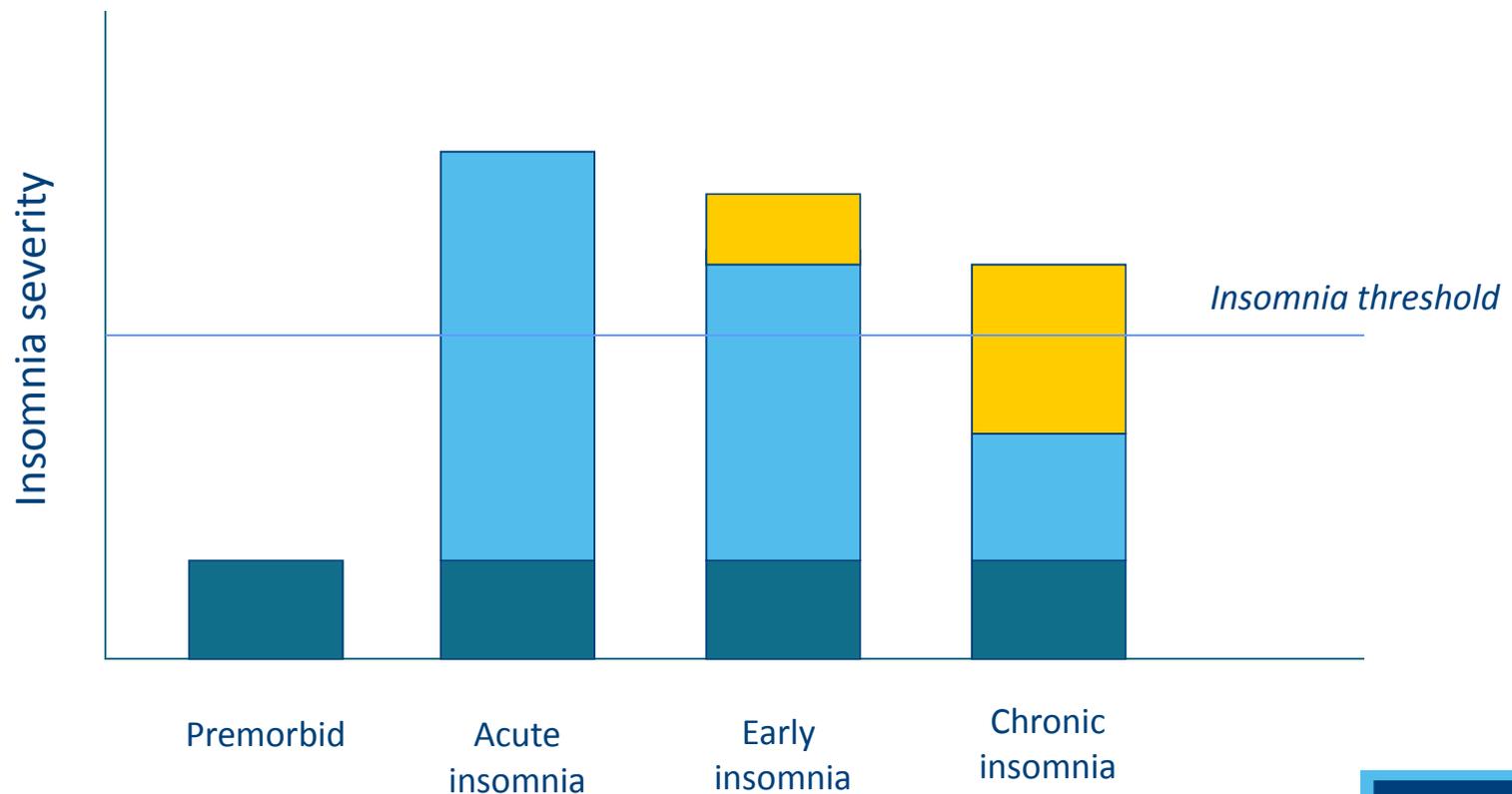


CBT-I: key components

- Behavioral component
 - Sleep hygiene
 - Sleep restriction
 - Stimulus control
 - Relaxation
- Cognitive component
 - Psycho-education
 - Cognitive restructuring
 - Worry management

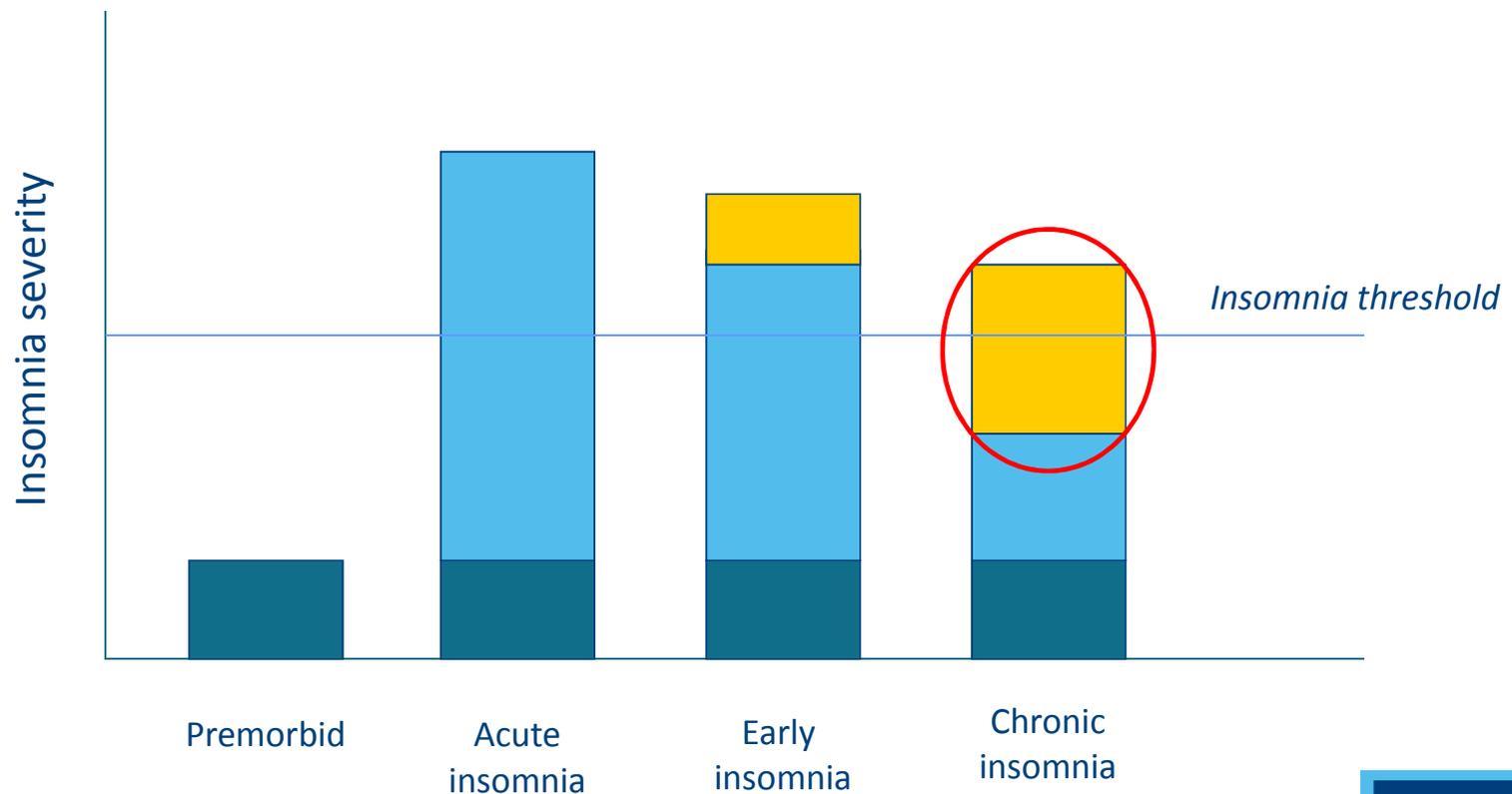
Psycho-education

- 3 P model (Spielman, 1991)

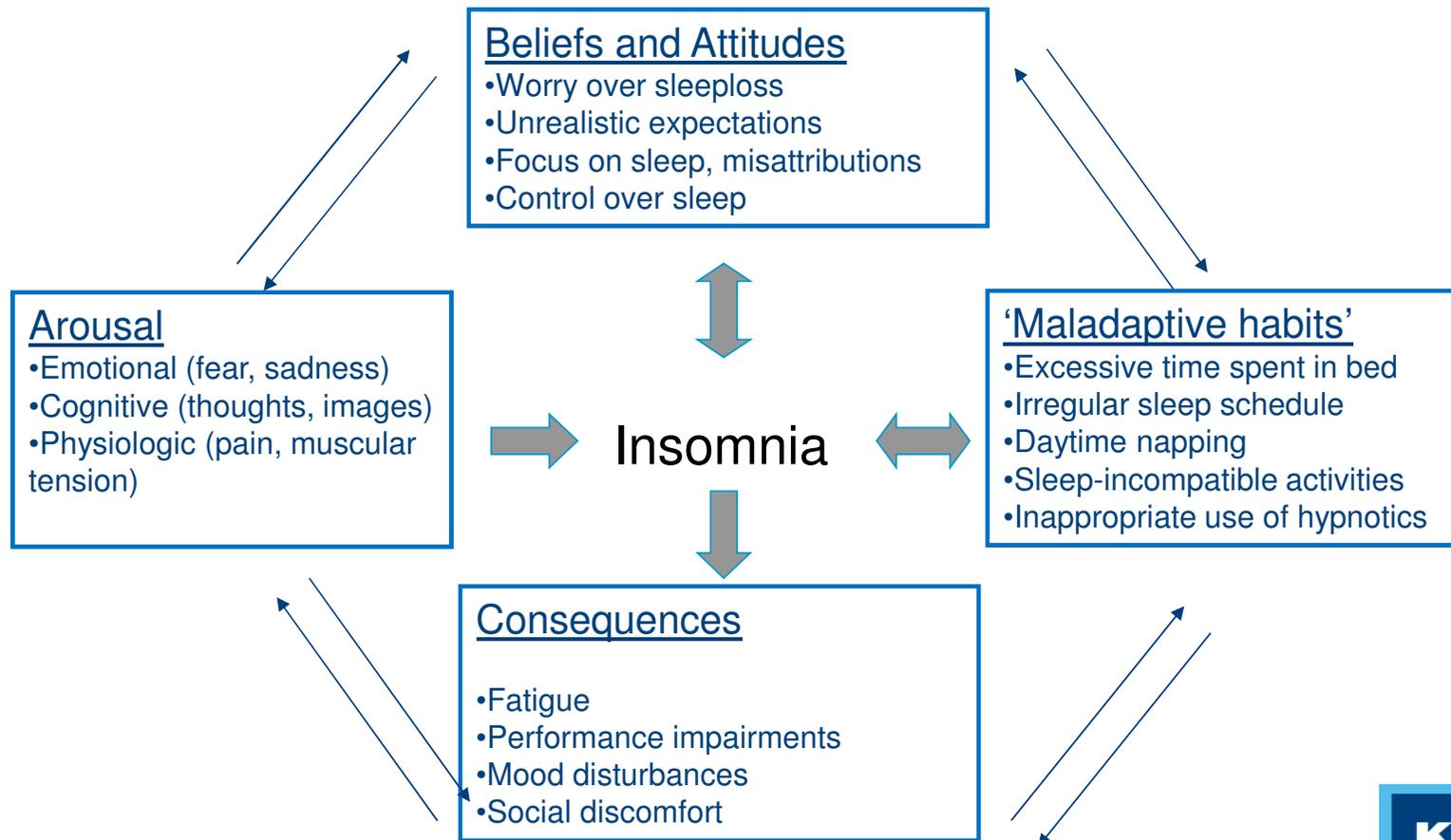


Psycho-education

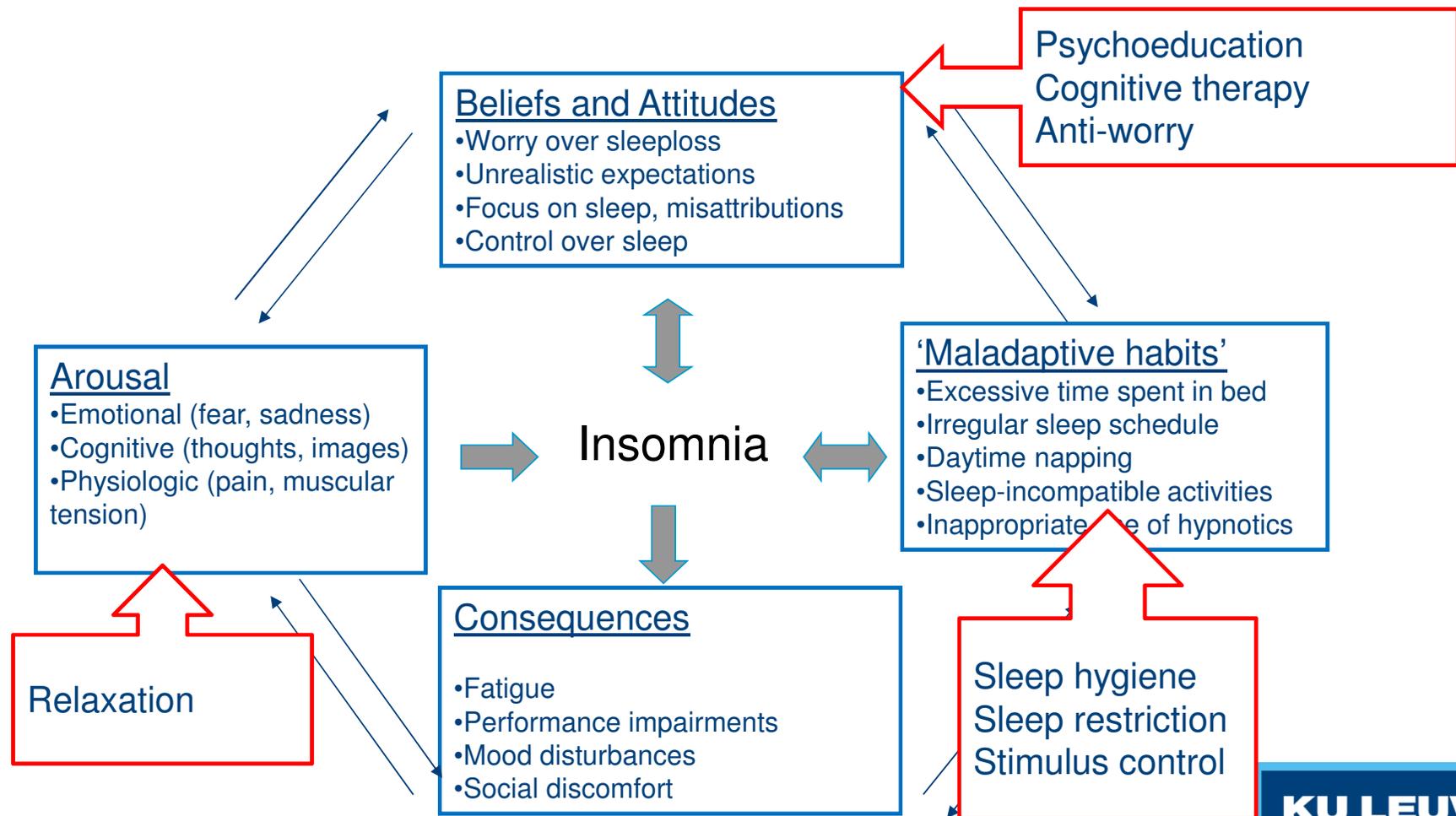
- 3 P model (Spielman, 1987)



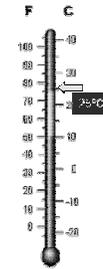
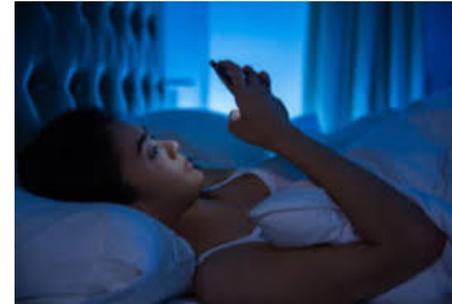
The vicious cycle of chronic insomnia (Morin)



The vicious cycle of chronic insomnia



Sleep hygiene



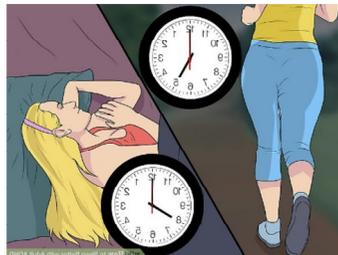
Lifestyle

Sleep hygiene

Bedroom



Caffeine inside



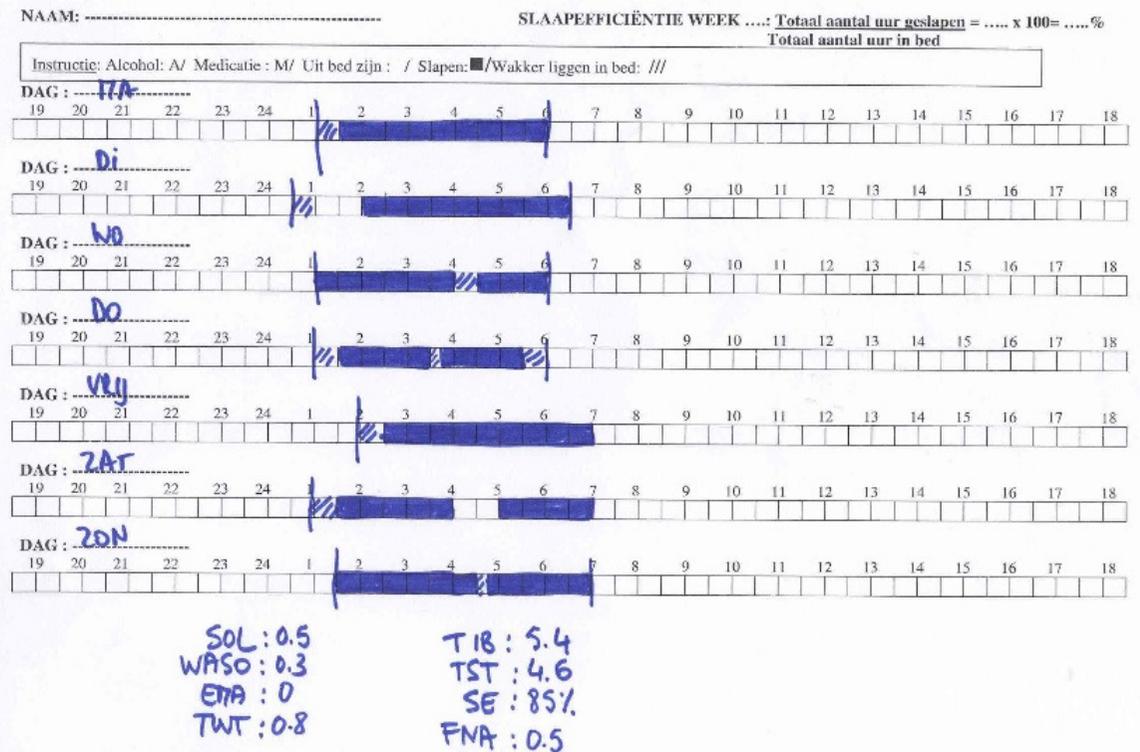
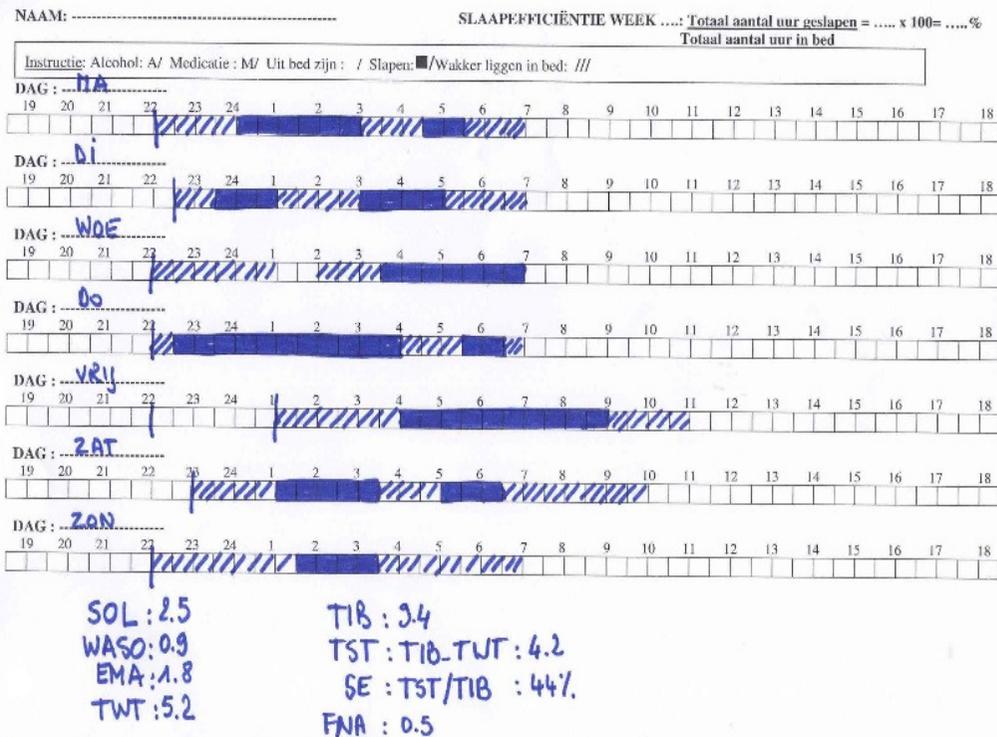
Sleep restriction

Sleep restriction rules

1. Determine the patient's average sleep time from a sleep diary.
2. Use this average sleep time as the new time allowed in bed each night.
3. Set a consistent wake time based upon the type of insomnia and patient need.
4. Have patient avoid daytime naps.
5. If sleep efficiency increases above 90 percent (85 percent for patients over 65 years of age), then increase time in bed by 15 to 30 minutes.
6. If sleep efficiency decreases below 85 percent (80 percent for patients over 65 years of age), then decrease time in bed by 15 to 30 minutes.

Data from: Spielman AJ, Yang, et al. Insomnia: Sleep restriction therapy. In: Insomnia Diagnosis and Treatment, Sateia MJ, Buysse DJ (Eds), Informa UK Ltd, London 2010. p.277.

Sleep restriction



Stimulus control

Stimulus control therapy rules

1. Go to bed only when sleepy.
2. Do not watch television, read, eat, or worry while in bed. Use bed only for sleep and sex.
3. Get out of bed if unable to fall asleep within twenty minutes and go to another room. Return to bed only when sleepy. Repeat this step as many times as necessary throughout the night.
4. Set an alarm clock to wake up at a fixed time each morning including weekends.
5. Do not take a nap during the day.

Data from: Bootzin RR, Perlis ML. Nonpharmacologic treatments of insomnia. J Clin Psychiatry 1992; 53:37.

Cognitive restructuring

- Why?
 - To correct misconceptions of insomnia causes and consequences
 - To alter unrealistic sleep expectations
 - To enhance perceptions of control and predictability
 - To dispell myths about good sleep practices
- How?
 - Identifying dysfunctional beliefs
 - Exploring and challenging the validity of cognitions
 - Working towards more adaptive and rational cognitions about sleep

Worry management

- Insomnia \Leftrightarrow Worry
 - Worry time
 - Being very strict and self-disciplined about not worrying in bed
 - Distraction techniques
 - Bodyscan
 - Imagery

Relaxation

- Insomnia \Leftrightarrow Tension
 - Breathing exercise (abdominal breathing; 4-7-8)
 - Progressive muscle relaxation
 - Autogenic relaxation
 - Imagery

Recent meta-analysis of psychological interventions on sleep in college students

	small	medium	large
Sleep hygiene	*	*	
CBT			*
Relaxation, MF, hypnotherapy	*	*	*
other		*	

Friedrich A. & Schlarb, A.A. (June 2017, Journal of Sleep Research)

Conclusions

- Insomnia is an important problem in college students
- Insomnia affects academic performance as well as general quality of life
- Several psychological interventions are evidence-based
- Recent meta-analysis shows largest effect-sizes for CBT-I

Take home message



Thank you for your wakefull attention!