

Trauma behandelen tijdens slaap, kan dat?

Hein van Marle
Workshop Nedkad 2020

(potentiele) belangenverstrengeling | Geen





Outline

- Posttraumatische-stressstoornis (PTSS)
- Behandeling van PTSS
- Geheugen consolidatie tijdens slaap
- Geheugen reactivering
- Trauma behandelen tijdens slaap
 - TMR-TRAUMA studie
 - Andere opties

Posttraumatische-stressstoornis (PTSS)



DSM-5

A: Blootstelling aan stressor

B: Intrusieve klachten (herinneringen, nachtmerries, flashbacks)

C: Vermijding

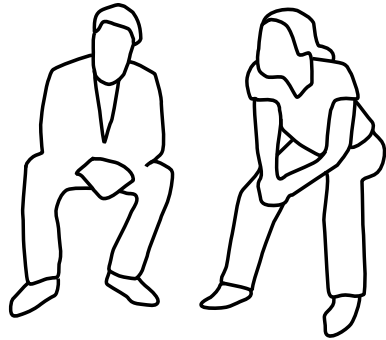
D: Negatieve veranderingen in cognitie en stemming

E: Veranderingen in arousal and reactiviteit

Specificeren: dissociatieve subtype

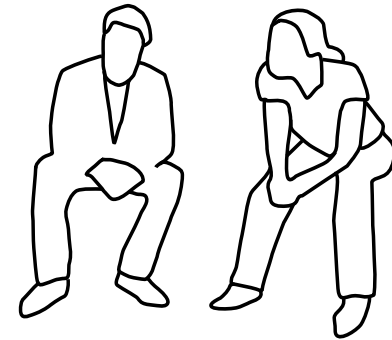
PTSS behandeling

Trauma herinnering = basis van PTSS



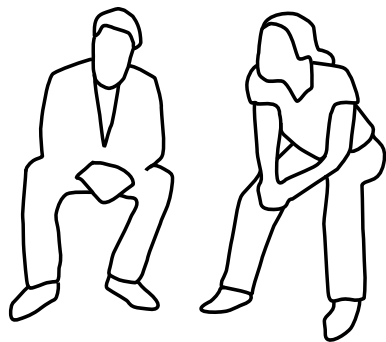
Behandeling

...



Behandeling

PTSS behandeling

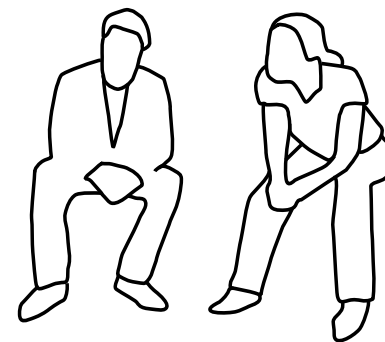


Behandeling

Geheugen
consolidatie



Slaap

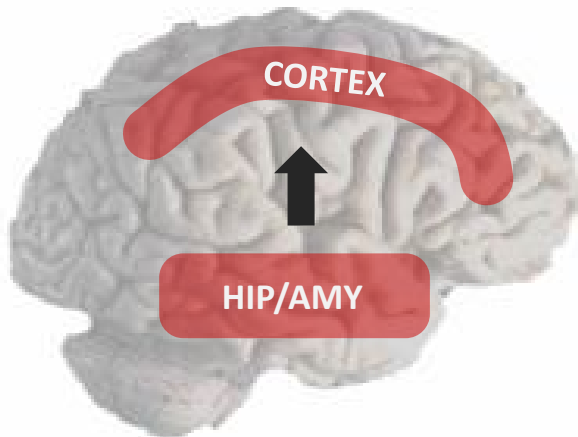


Behandeling

Geheugen consolidatie

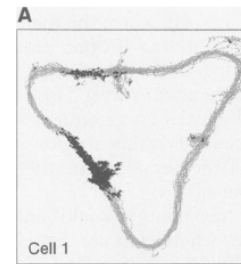
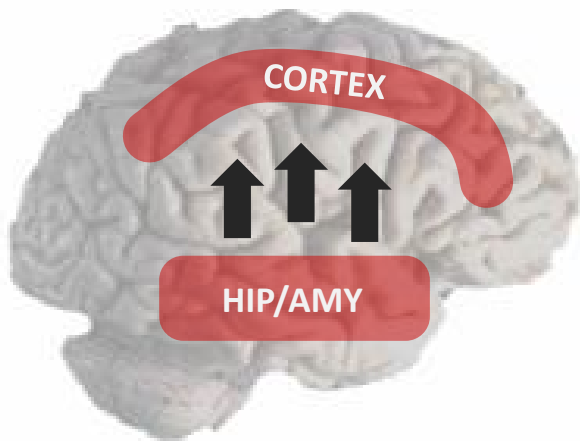
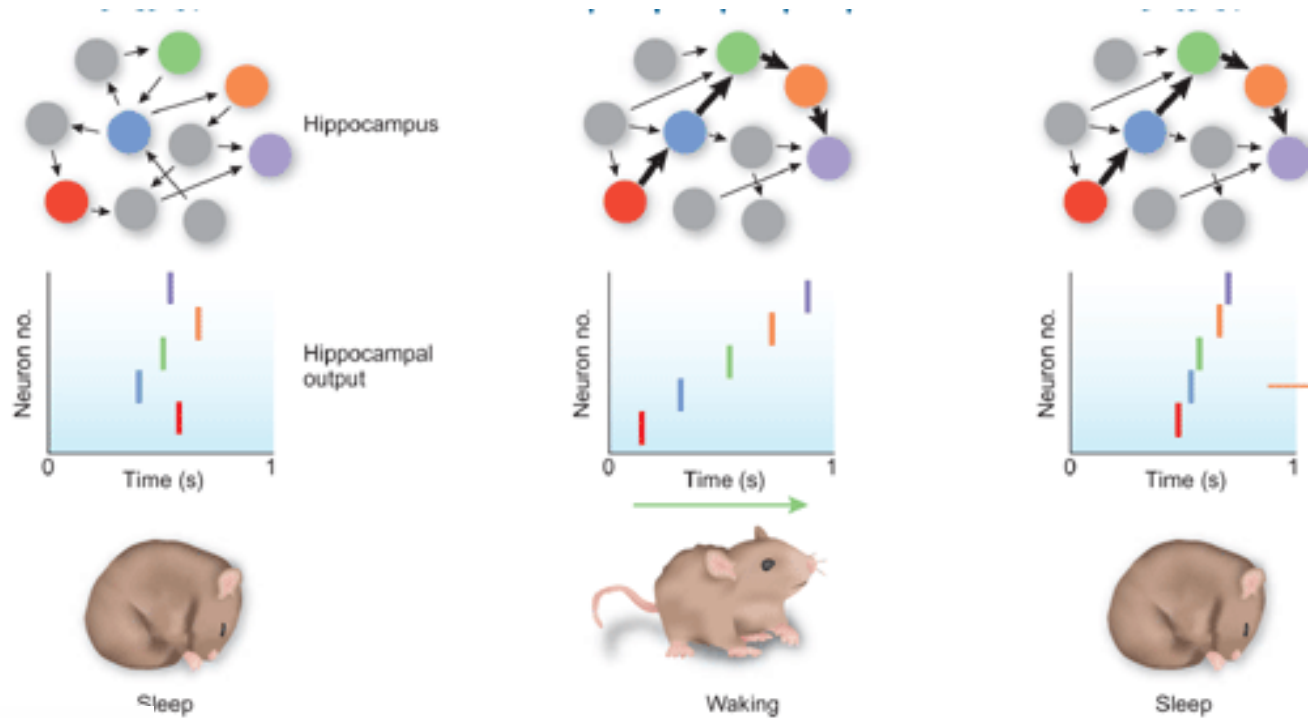


Geleidelijke **reorganisatie** van initieel labiel geheugen tbv de lange termijn opslag

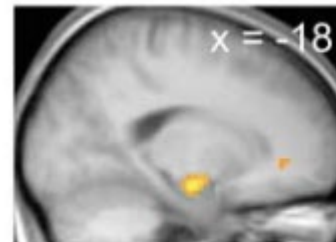
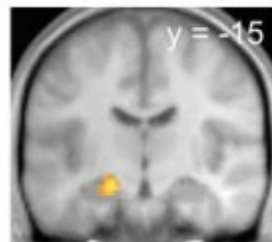
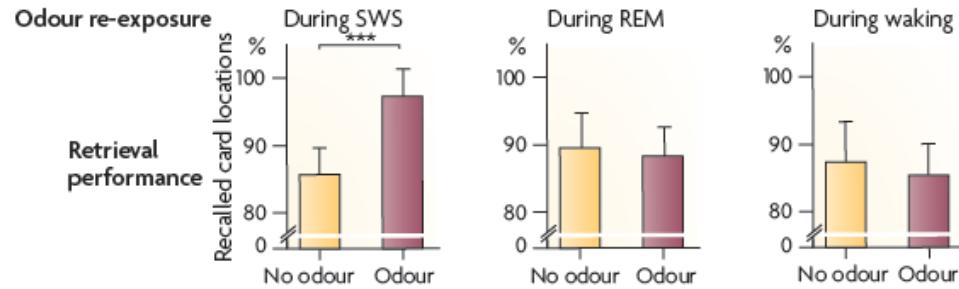
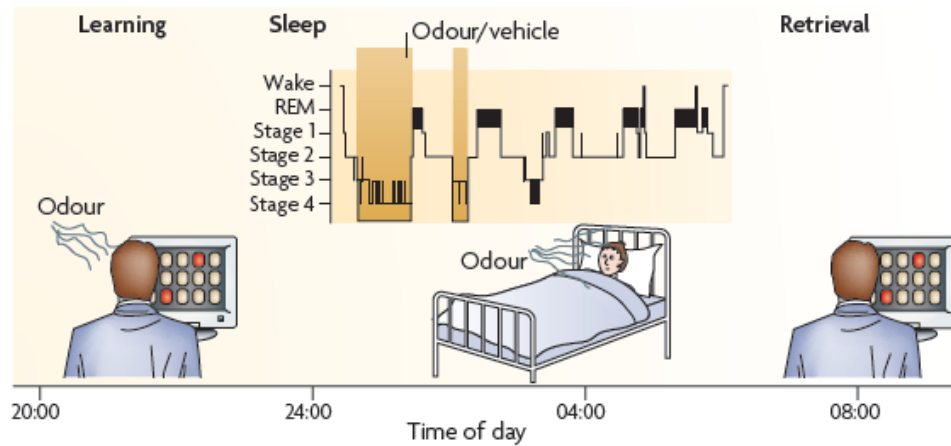


- Tijd en slaap afhankelijk
- Ontkoppeling van geheugen inhoud en emotionele lading

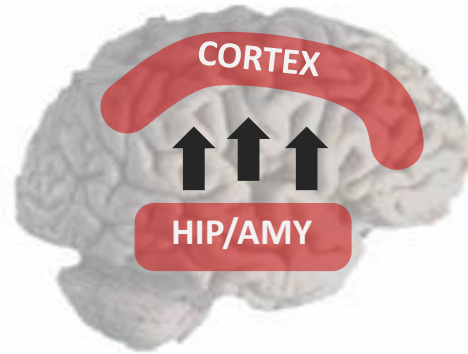
Replay: mechanisme achter consolidatie



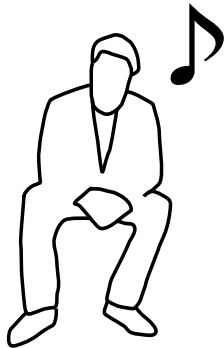
Geheugen reactivating (TMR)



Geheugen reactivering (TMR)

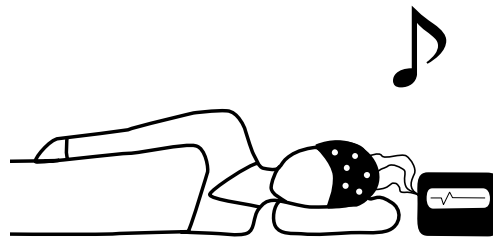


Geur



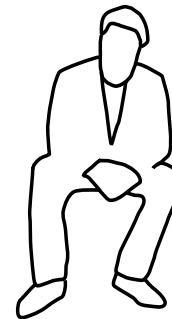
Leren

Geur



Slaap

!

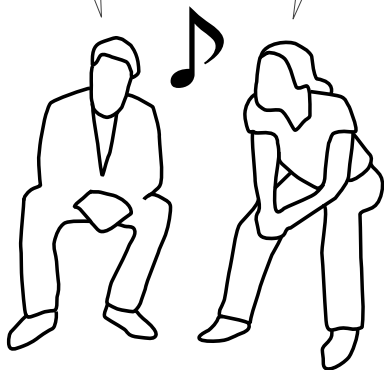


Beter geheugen

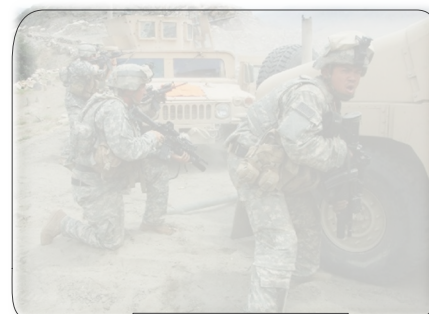
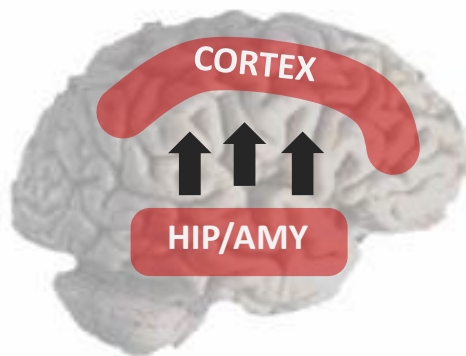
Trauma behandelen tijdens slaap?



Geur



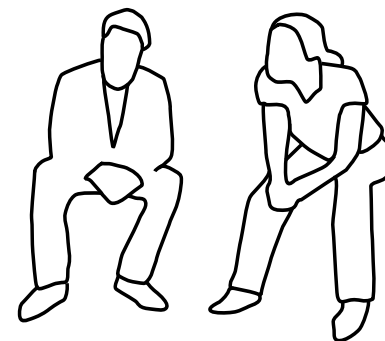
Behandeling



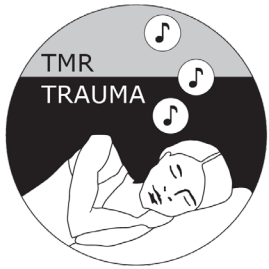
Geur



Slaap



Behandeling

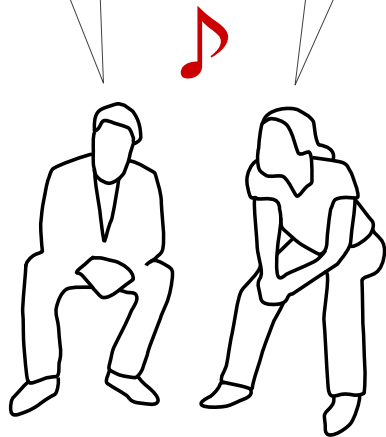


TMR-TRAUMA studie



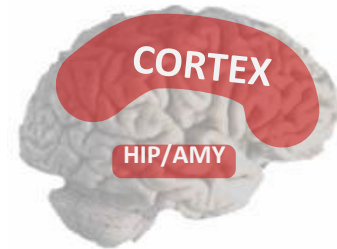
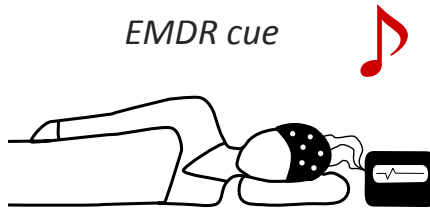


TMR-TRAUMA studie

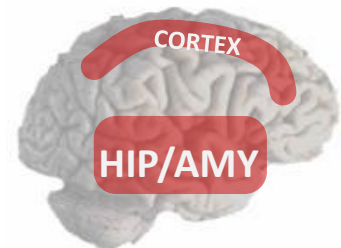


1 sessie EMDR

reactivatie met
EMDR cue



controle: geen cue



Slaap

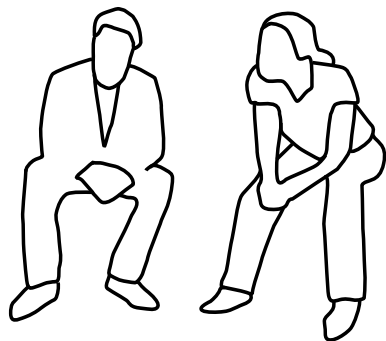
Andere behandelopties tijdens slaap



TMR

Medicatie

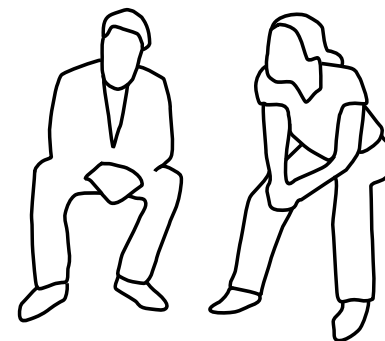
Deprivatie



Behandeling



Slaap



Behandeling

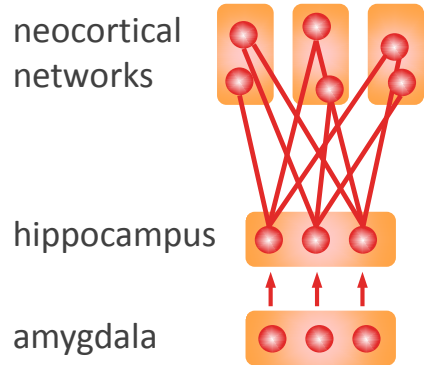
Samenvatting

- PTSS behandeling = geheugen proces
- Slaap = unieke window of opportunity voor behandeling
- TMR = manier om trauma herinneringen te beïnvloeden

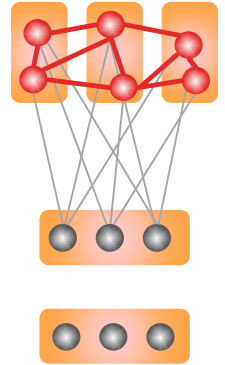
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traumabehandelentijdensslaap@vumc.nl

Treatment Experimental treatments



- *Facilitate or disrupt consolidation?*
- *TMR: What to reactivate?*
- *Timing of intervention ~ therapy*



"A year ago I got ambushed on patrol. I was terrified."

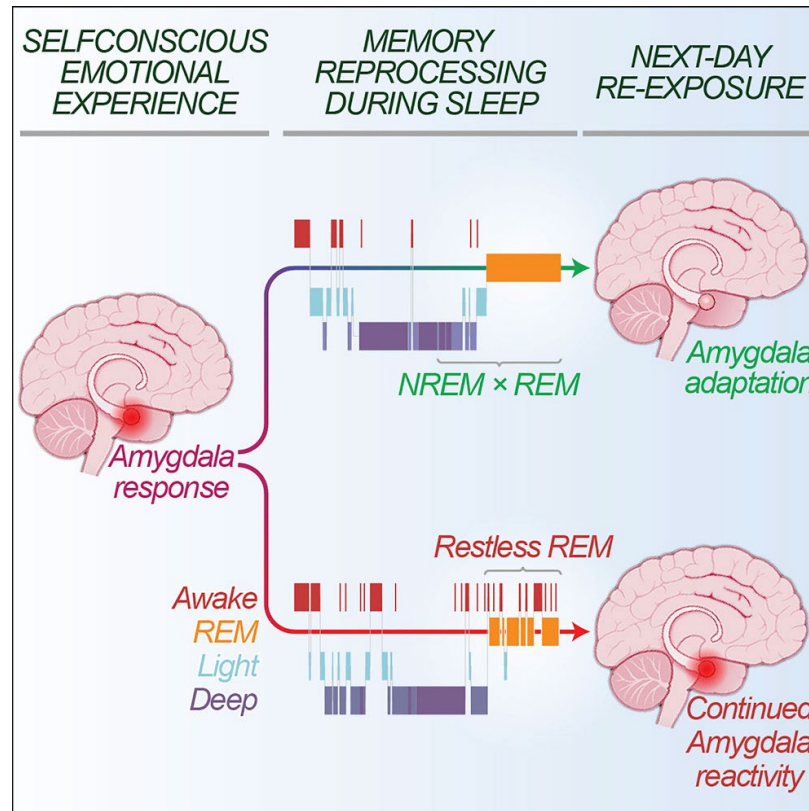


Sleep

Therapy

Sleep

Rusteloze REM-slaap



Research *PTSD and sleep*

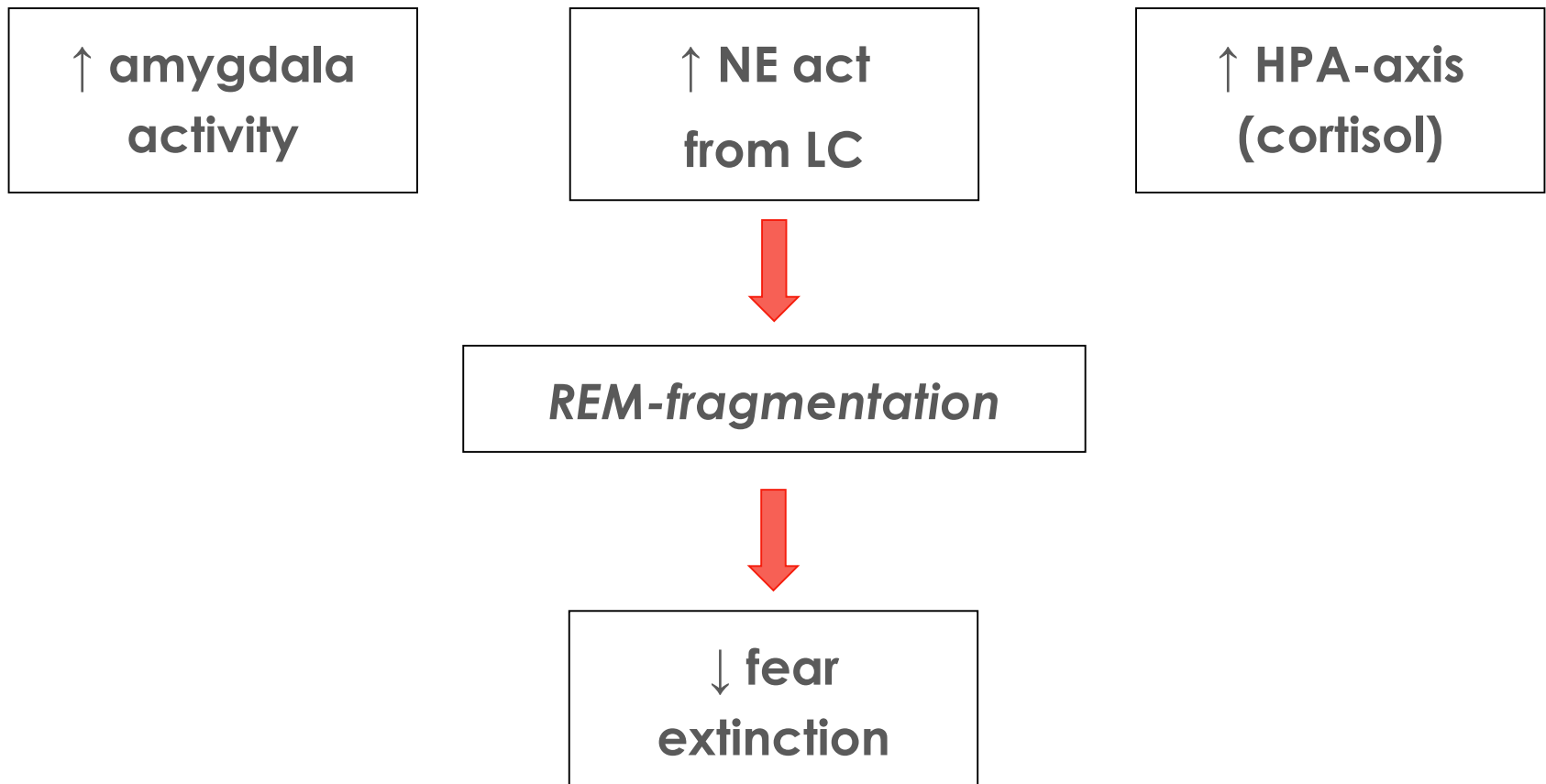
- Insomnia and nightmares core symptoms
- **Objective sleep disturbances** in PTSD-patients:
 - ↓ SWS, ↑ stage 1 sleep, ↑ REM density¹
 - ↓ slow wave power during SWS, but ↑ during REM²
- Sleep complaints pre- and post-trauma **predict PTSD** e.g. 3
- **Sleep** and **PTSD treatment**:
 - Sleep disturbance and symptoms improve in parallel e.g. 4 and 5
 - ↑ % SWS and ↓ REM density after treatment predict better treatment outcome⁶

¹Zhang, *SleepRevMed* 2019; ²DeBoer, *Sleep* 2019; ³Bryant, *Sleep* 2010; ⁴Lommen, *DeprAnx* 2016; ⁵Talbot, *Sleep* 2014;

⁶Kobayashi, *JTrStress* 2016

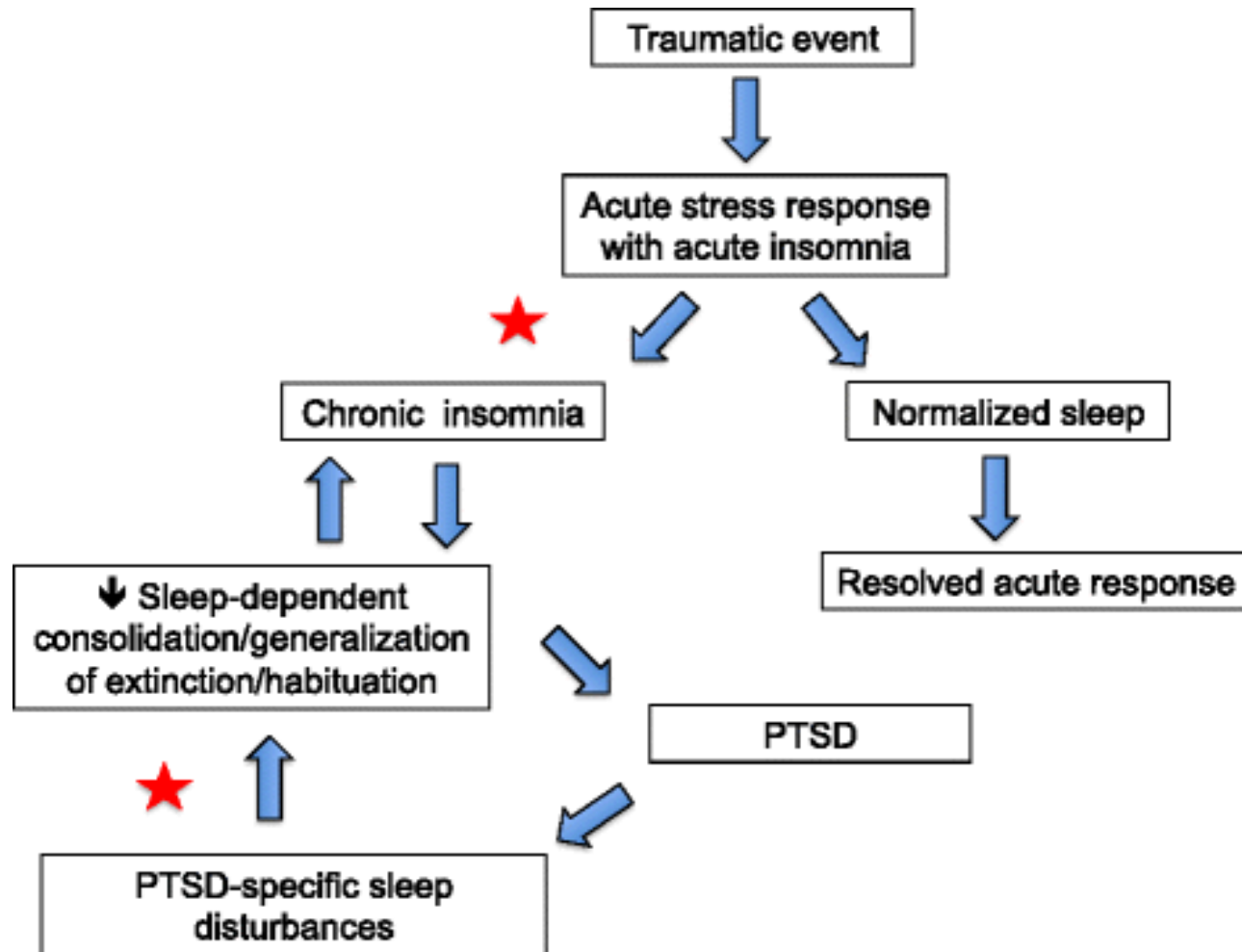
Model

PTSD: Disturbed REM sleep?

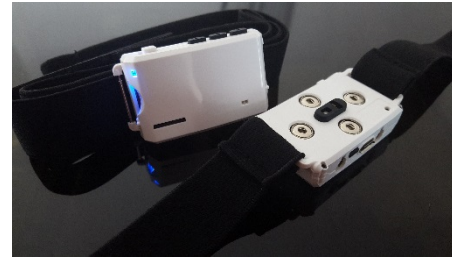


Model

PTSD: Disturbed sleep in general?



Treatment Registering Sleep during Trauma treatment (REST)



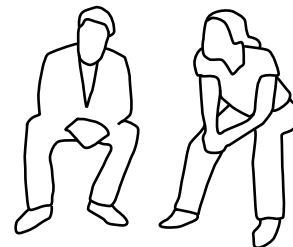
"A year ago I got ambushed on patrol. I was terrified."



Therapy



Sleep



Therapy



Sleep



Post-therapy

