



FINNISH PRINCIPAL BAROMETER - PHYSIOLOGICAL RESPONSES



Minna Huotilainen
Kasvatustieteen professori, Helsingin yliopisto

ELEMENTS OF STRESS AND RECOVERY

Acute stress Acute recovery

- fire alarm
- startle
- laughter
- relief

Daily stress Daily recovery

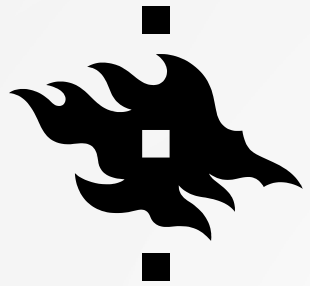
- stressful day
- feeling busy
- didn't sleep well
- good breaks
- feeling safe
- slept well

Long-term stress Long-term recovery

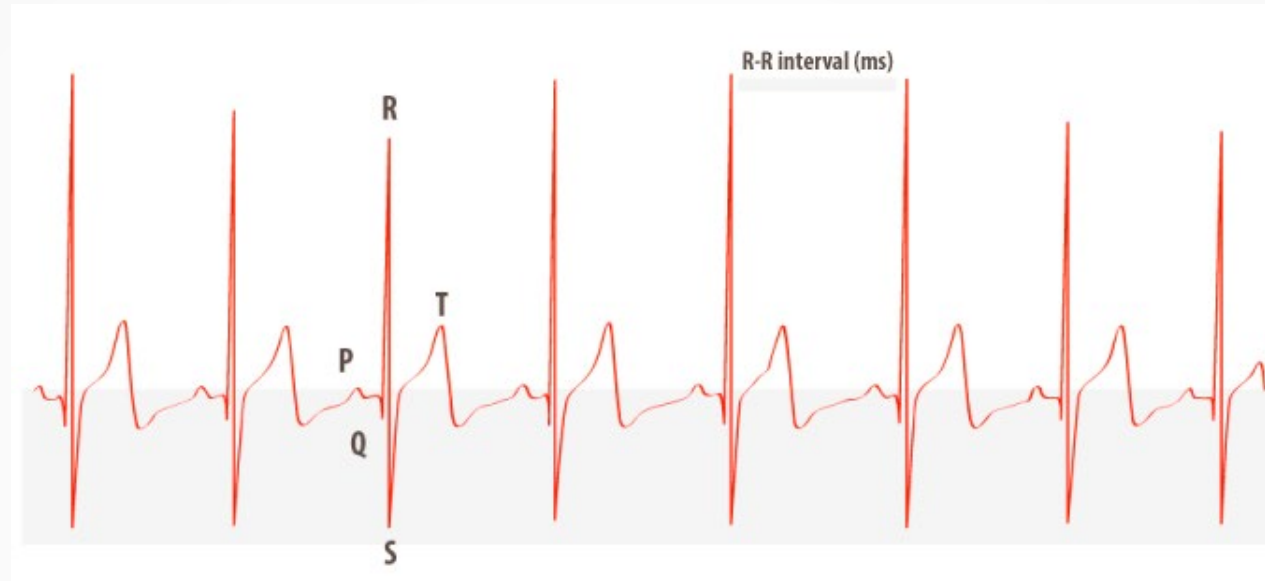
- stressful lifestyle
- sleeping problems
- recovery lifestyle
- good sleeping habits

physiological
measurements

questionnaires



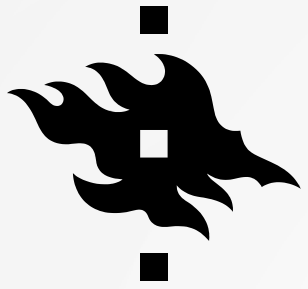
AUTONOMOUS NERVOUS SYSTEM AND FIGHT-AND-FLIGHT



- Physical activity and stress make the heart rate go up – the heart beats faster = higher pulse

- Stress makes the heart beat more evenly, like a clock = lower heart rate variability





MEASUREMENT OF HEART-RATE VARIABILITY AND PHYSICAL ACTIVITY

The measurement lasts for 4 days and nights

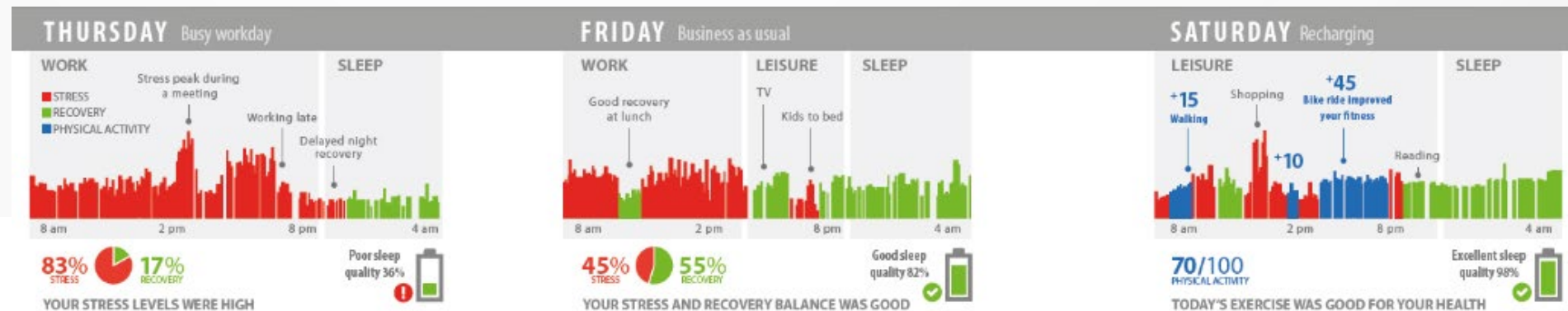
We typically include two days at work and the weekend

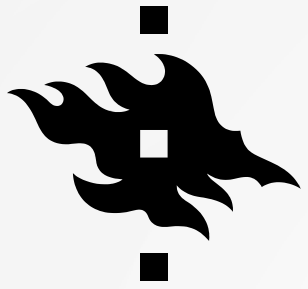
Heart rate, heart rate variability (HRV), physical activity, sleep

Growing attendance (2019 N=50, 2023 N=200)

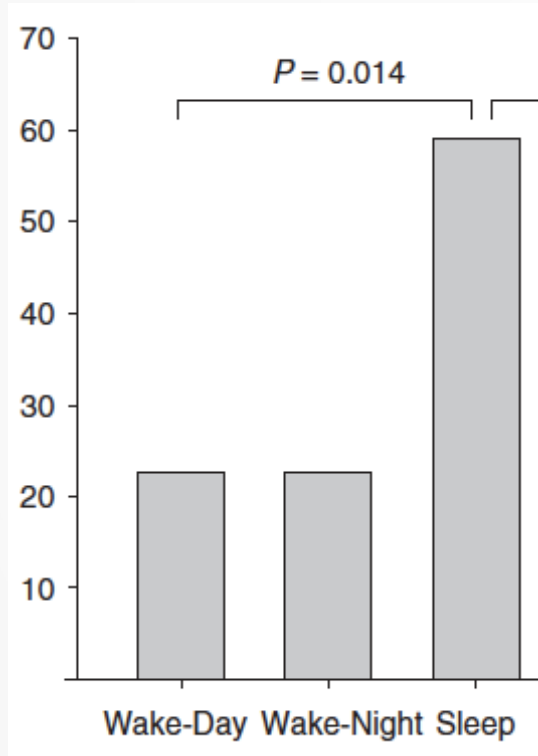


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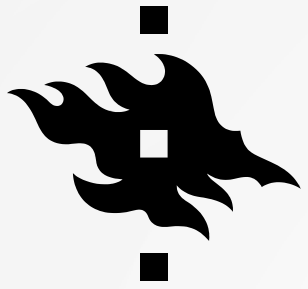




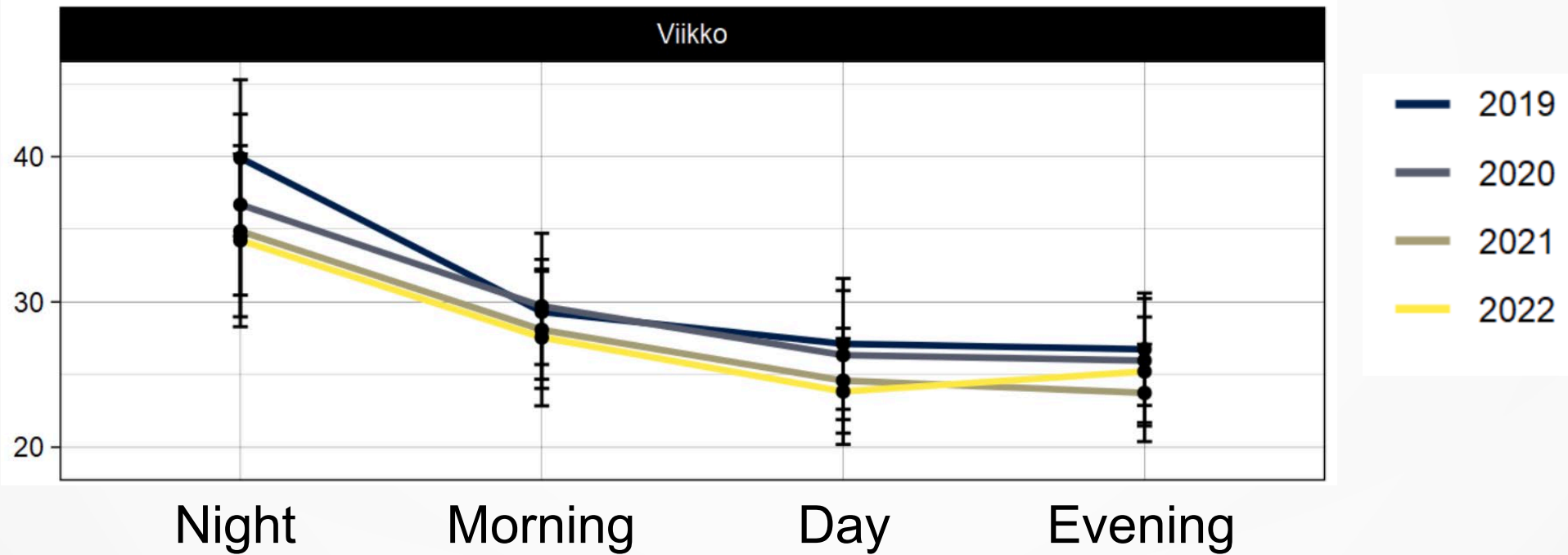
THE IMPORTANCE OF SLEEP IN DEVELOPING WORK

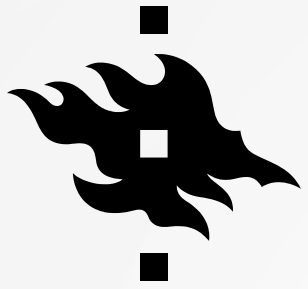


- Insight study: how to figure out the best (faster and easier) way to do the new task?
- After sleeping well, approx. 60% of the participants get the insight

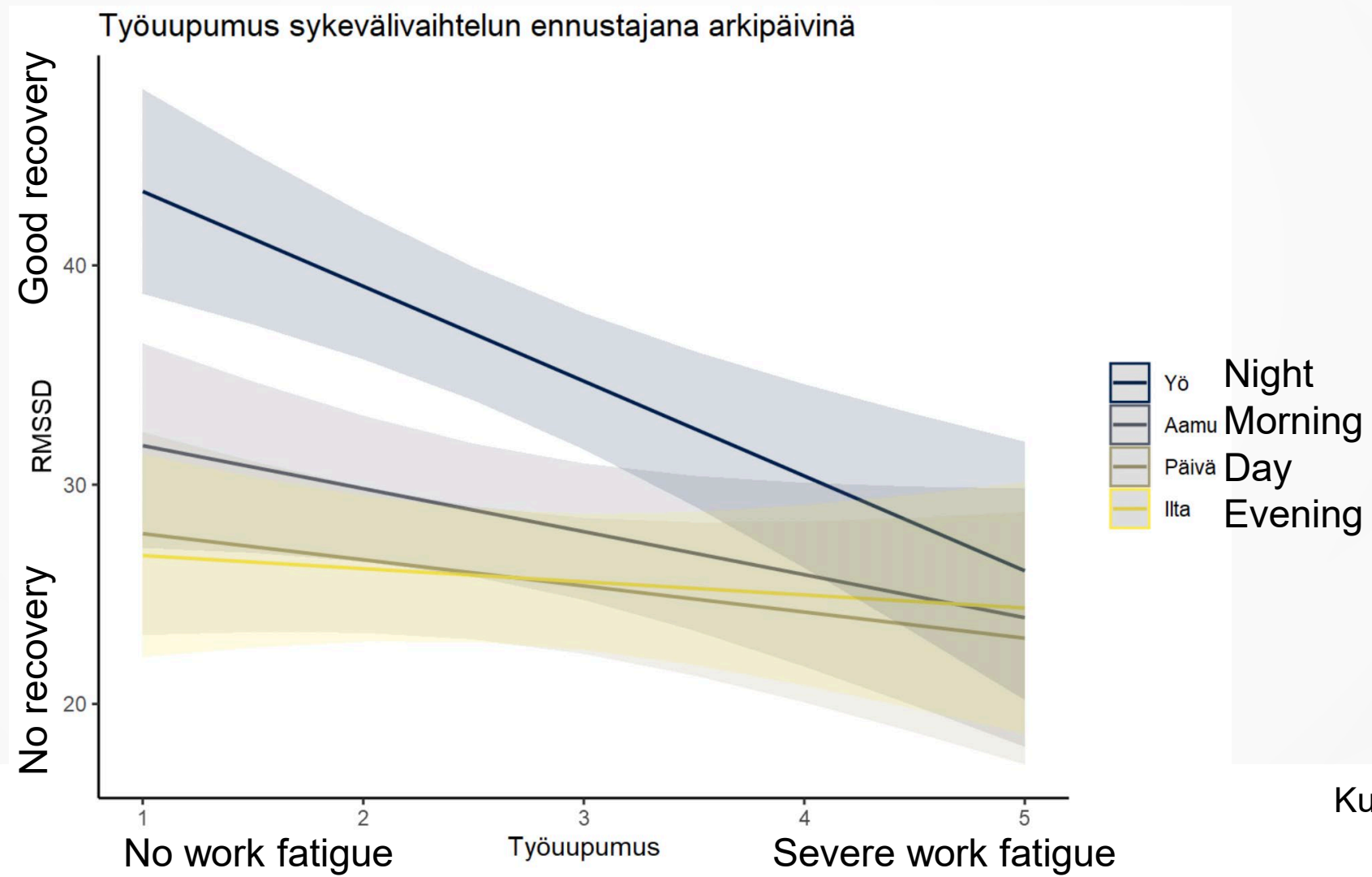


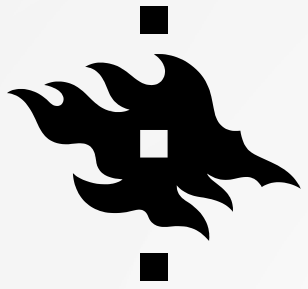
HEART-RATE VARIABILITY IS DECREASING



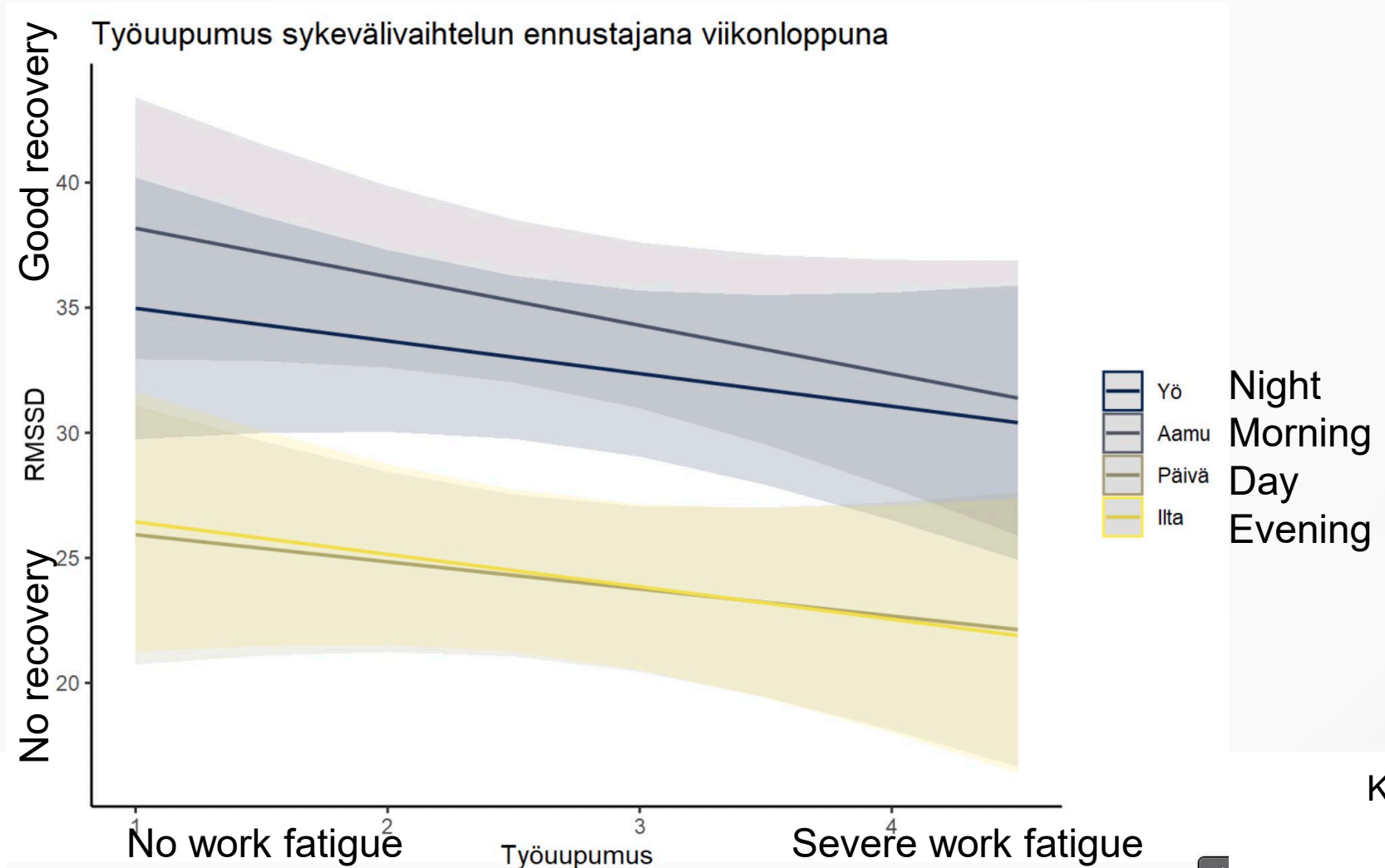


PRINCIPALS WITH WORK FATIGUE DON'T RECOVER DURING THE WEEK





RECOVERY DURING WEEKENDS





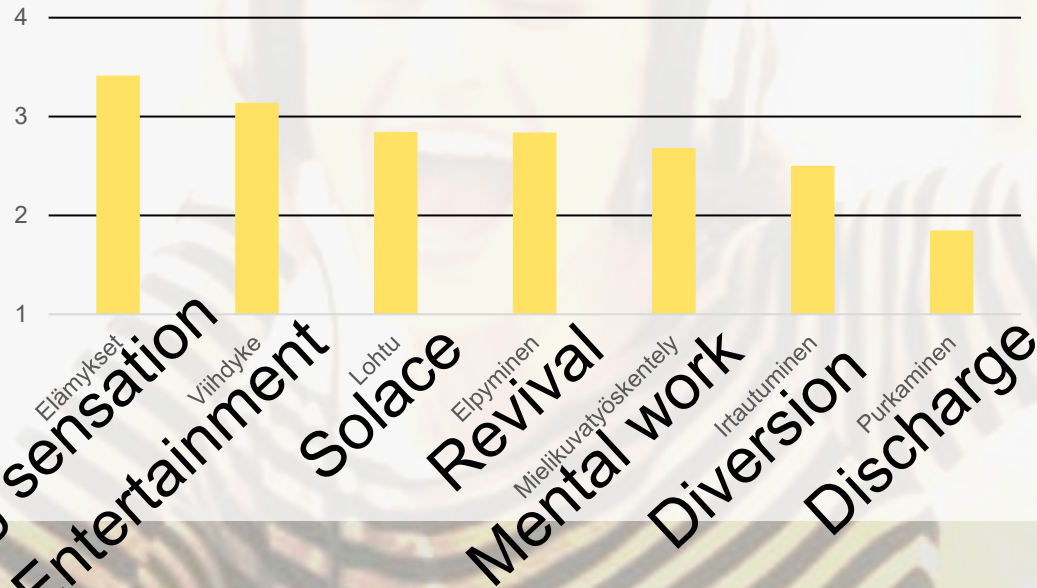
MUSIC AS A PROXY FOR ROLE OF EMOTIONS

- How do you use music to deal with your emotions?
- Strategies of stress relief



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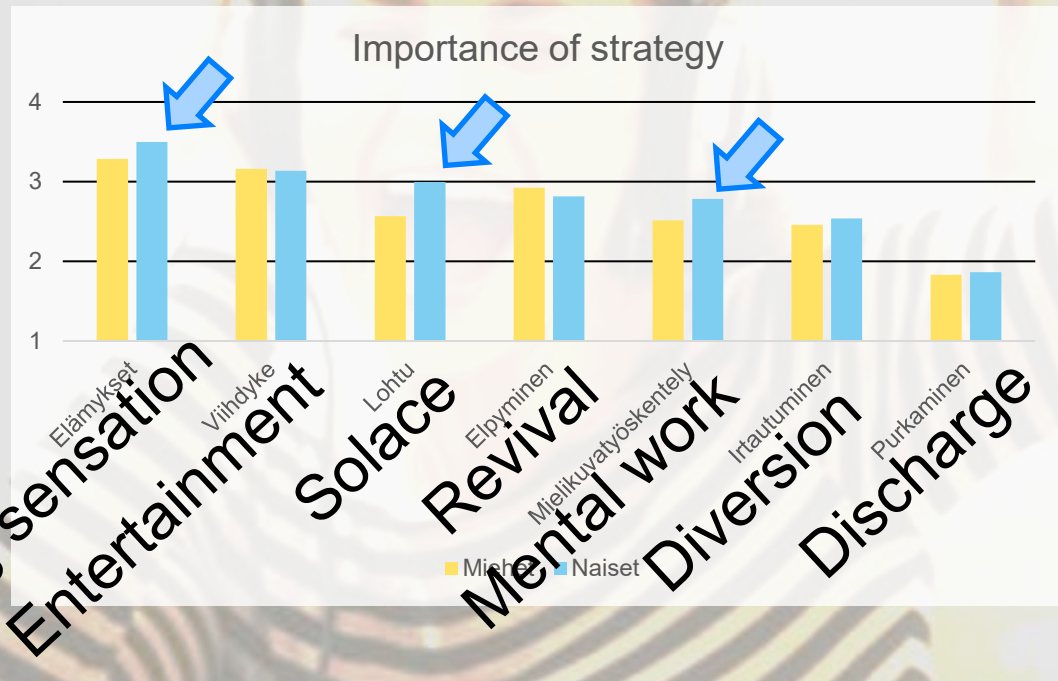
Importance of strategy



- How do you use music to deal with your emotions?
- Strategies of stress relief



MALES AND FEMALES USE DIFFERENT STRATEGIES

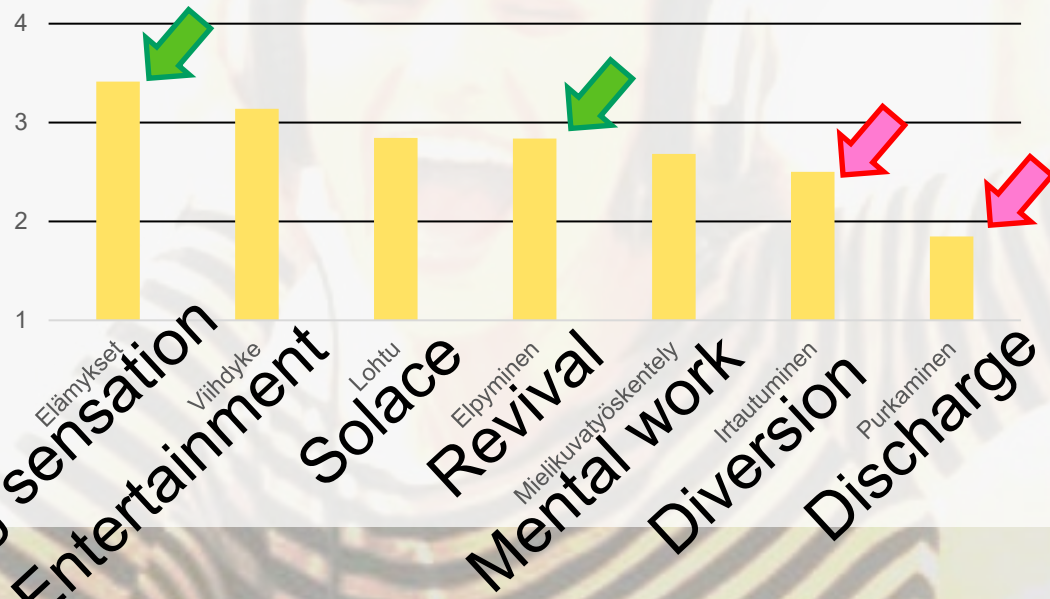


- Women use music more to seek strong sensations, find solace and engage in mental work



PRINCIPALS USE SUCCESSFUL STRATEGIES

Importance of strategy



- ➡ Revival is a very successful strategy and it is related also to good recovery in the questionnaires
- ➡ Diversion and discharge are known to be problematic strategies when used alone



Objective measurements of recovery and stress complement the questionnaires and are useful to the participants.

music may be used as a proxy to understand recovery and emotional work.