



FINNISH PRINCIPAL BAROMETER - PHYSIOLOGICAL RESPONSES

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ELEMENTS OF STRESS AND RECOVERY

Acute stress Acute recovery

- fire alarm
- startle
- laughter
- relief

Daily stress Daily recovery

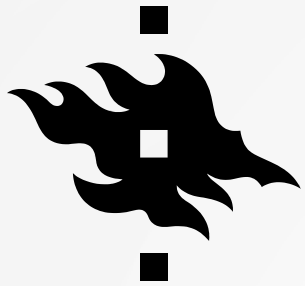
- stressful day
- feeling busy
- didn't sleep well
- good breaks
- feeling safe
- slept well

Long-term stress Long-term recovery

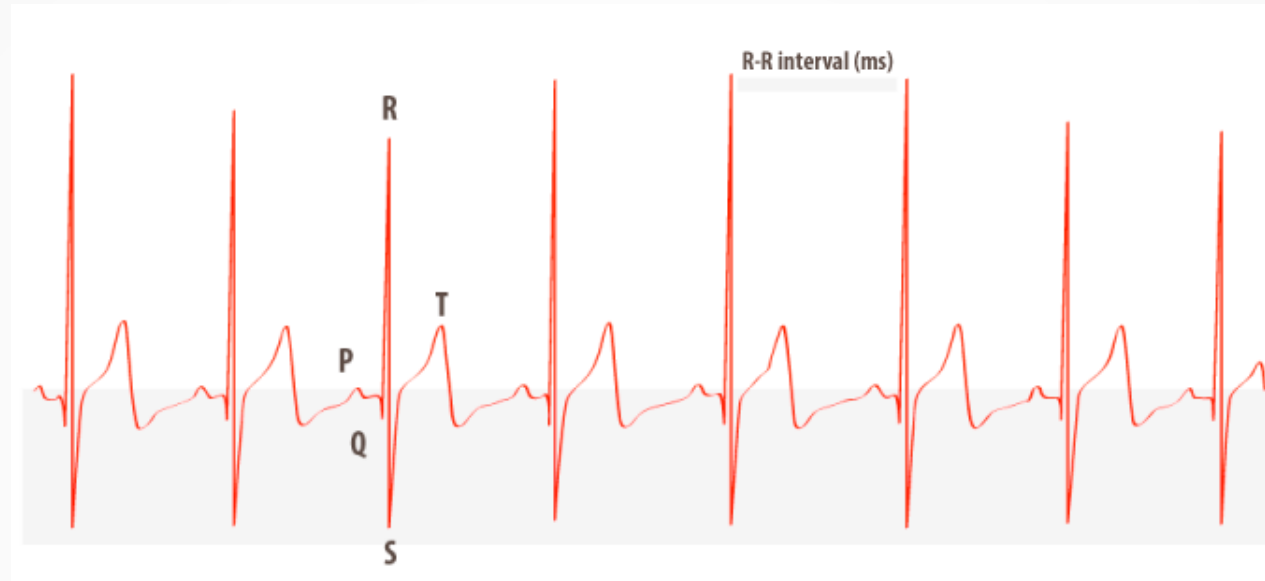
- stressful lifestyle
- sleeping problems
- recovery lifestyle
- good sleeping habits

physiological
measurements

questionnaires



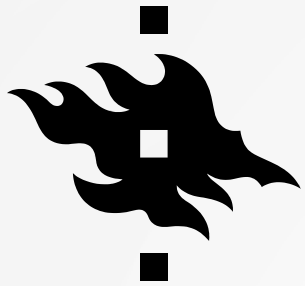
AUTONOMOUS NERVOUS SYSTEM AND FIGHT-AND-FLIGHT



- 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

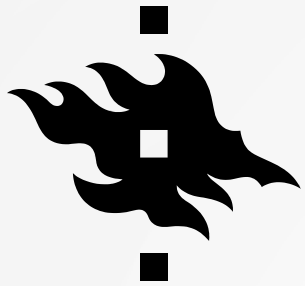
Heart rate, heart rate variability (HRV), physical activity, sleep

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

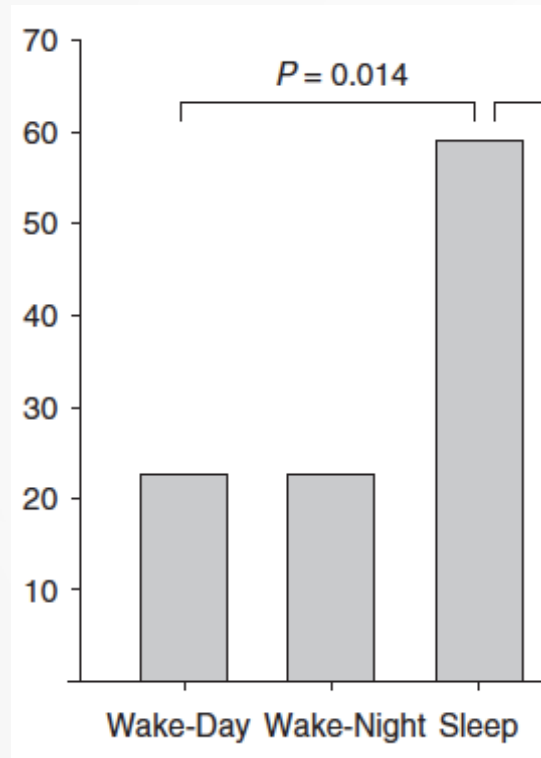


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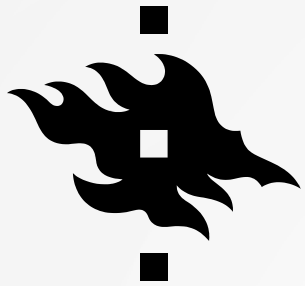




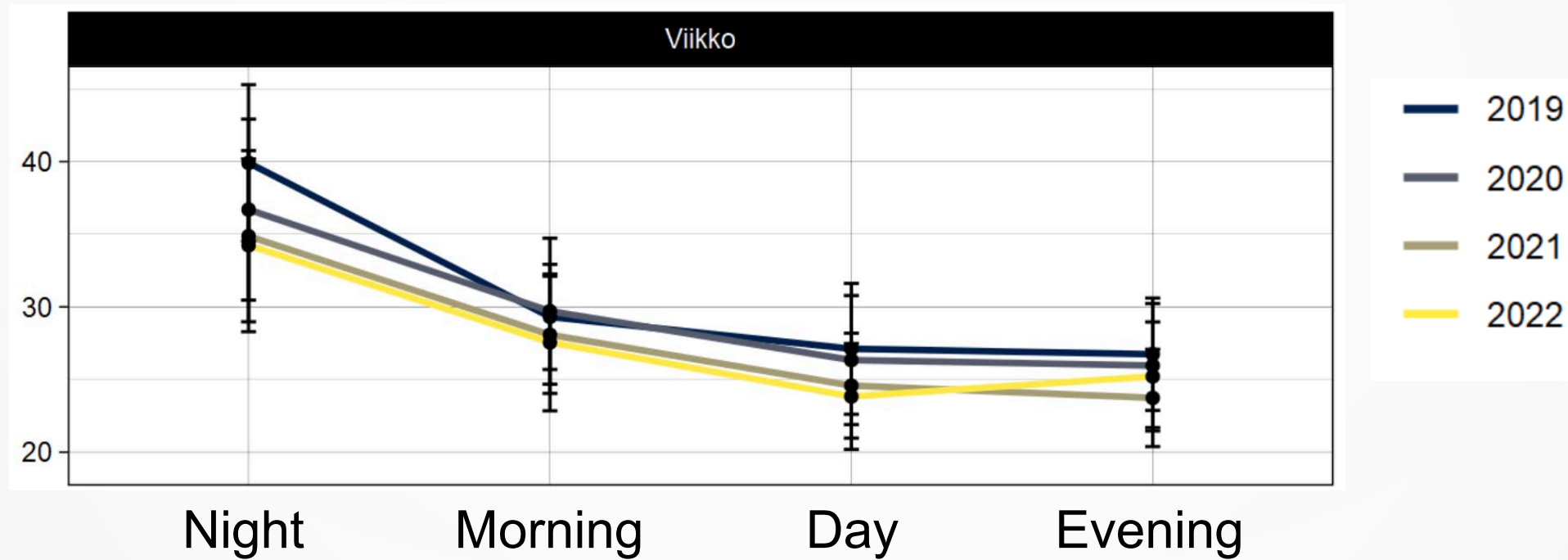
THE IMPORTANCE OF SLEEP IN DEVELOPING WORK

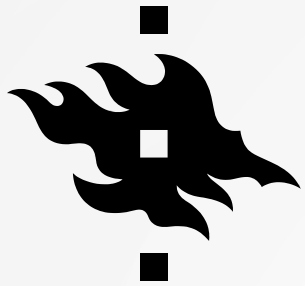


- Insight study: how to figure out the best (faster and easier) way to do the new task?
- After sleeping well, approx. 60% of the participants get the insight

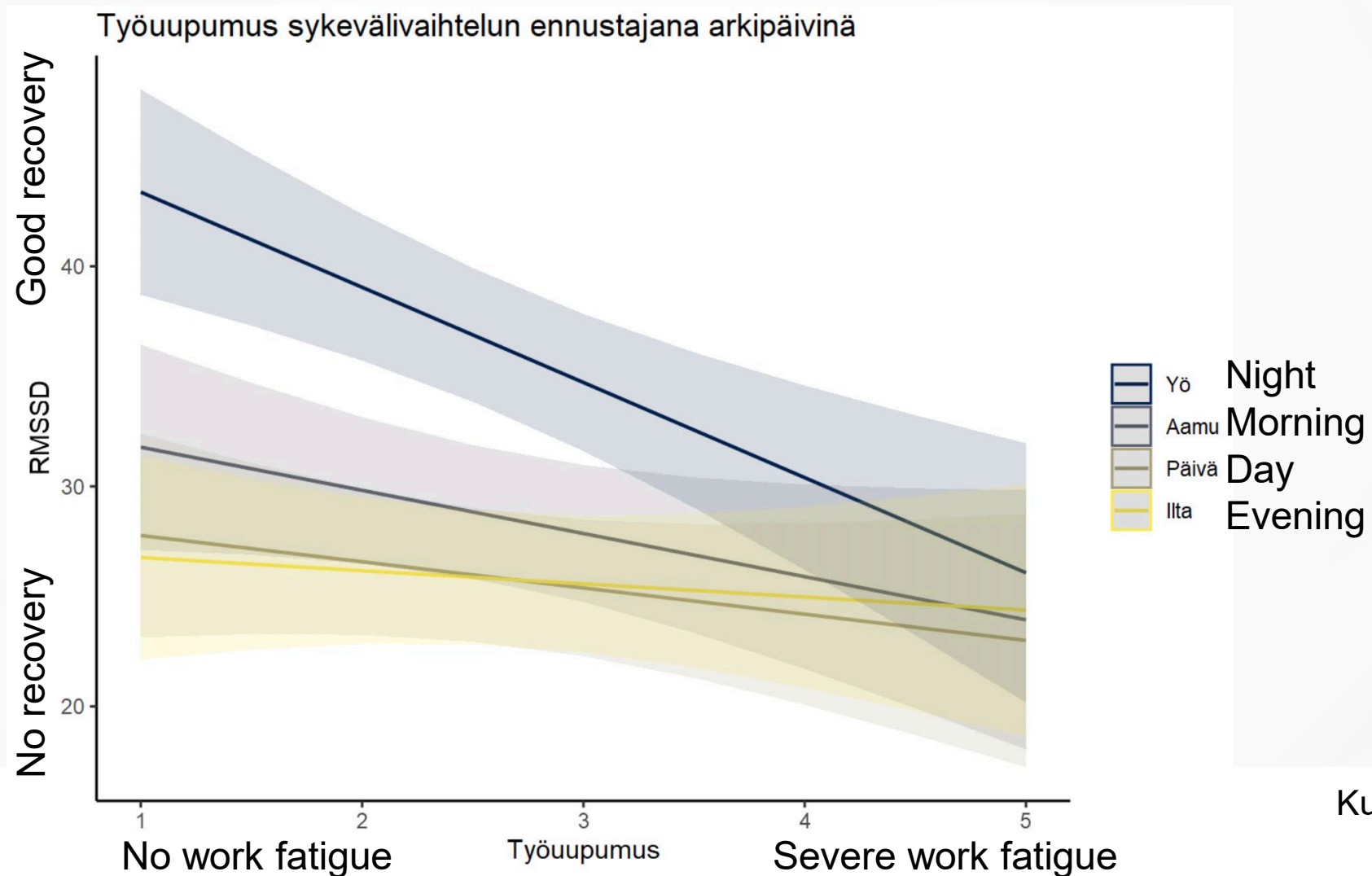


HEART-RATE VARIABILITY IS DECREASING



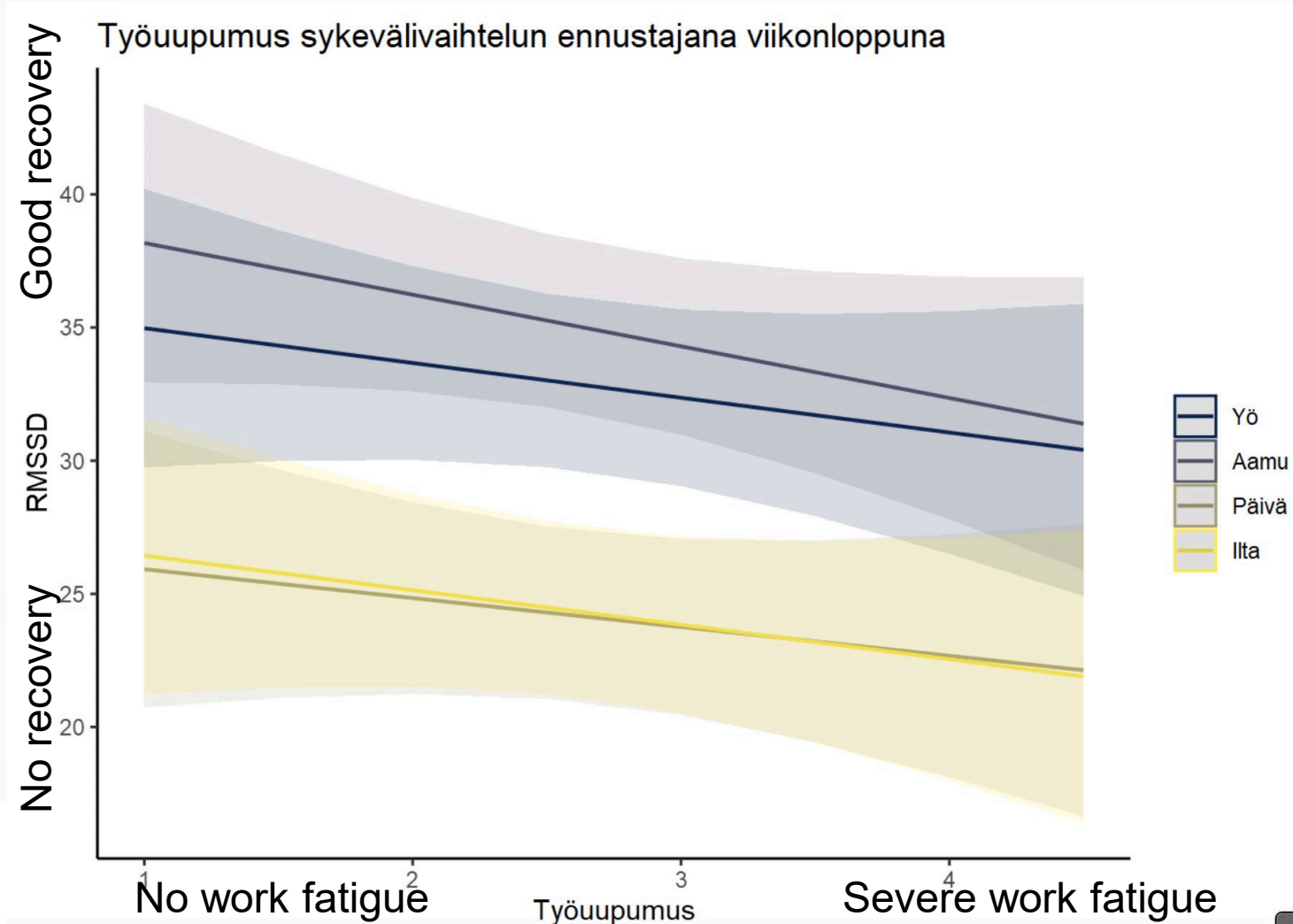


PRINCIPALS WITH WORK FATIGUE DON'T RECOVER DURING THE WEEK





RECOVERY DURING WEEKENDS



Yö Night
Aamu Morning
Päivä Day
Ilta Evening



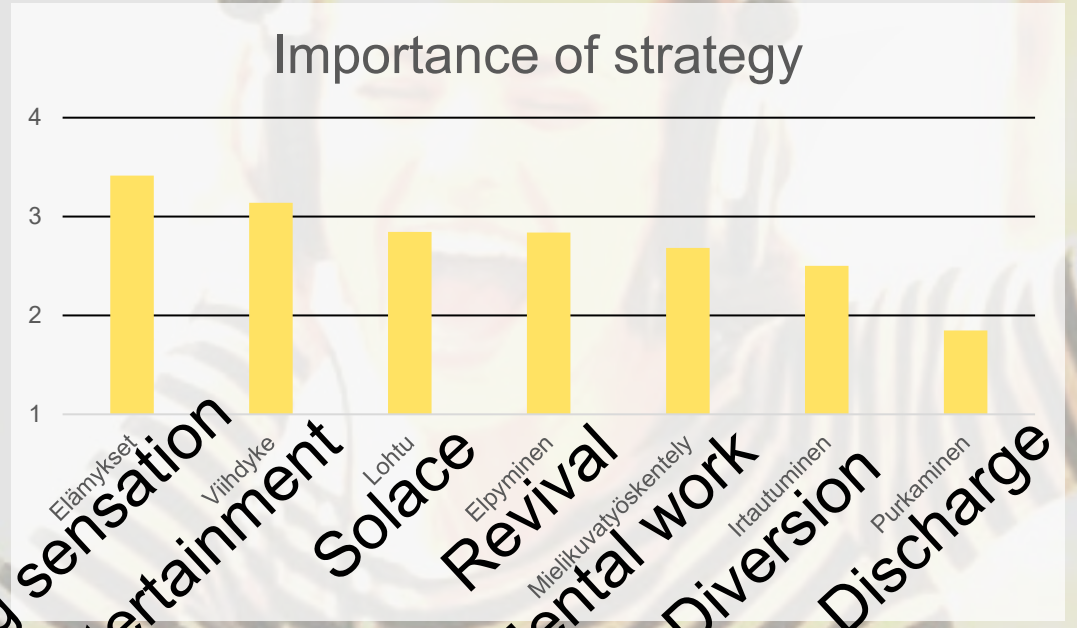
MUSIC AS A PROXY FOR ROLE OF EMOTIONS

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



MUSIC AS A PROXY FOR ROLE OF EMOTIONS

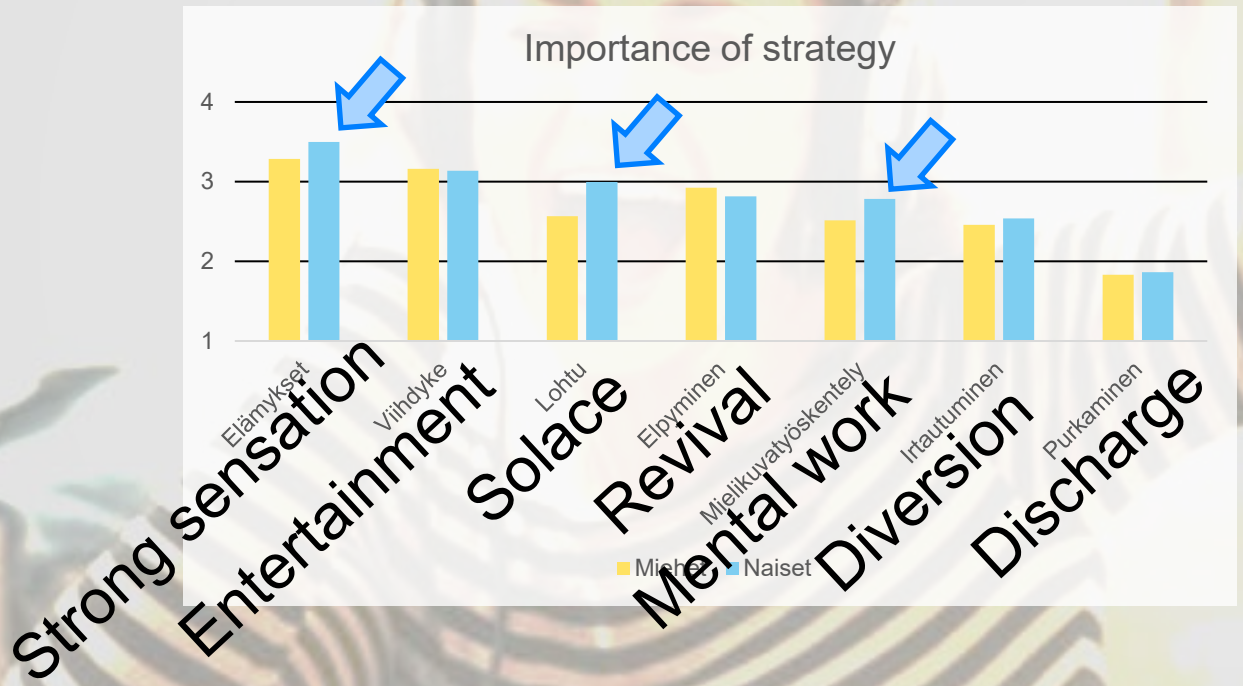
Importance of strategy



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



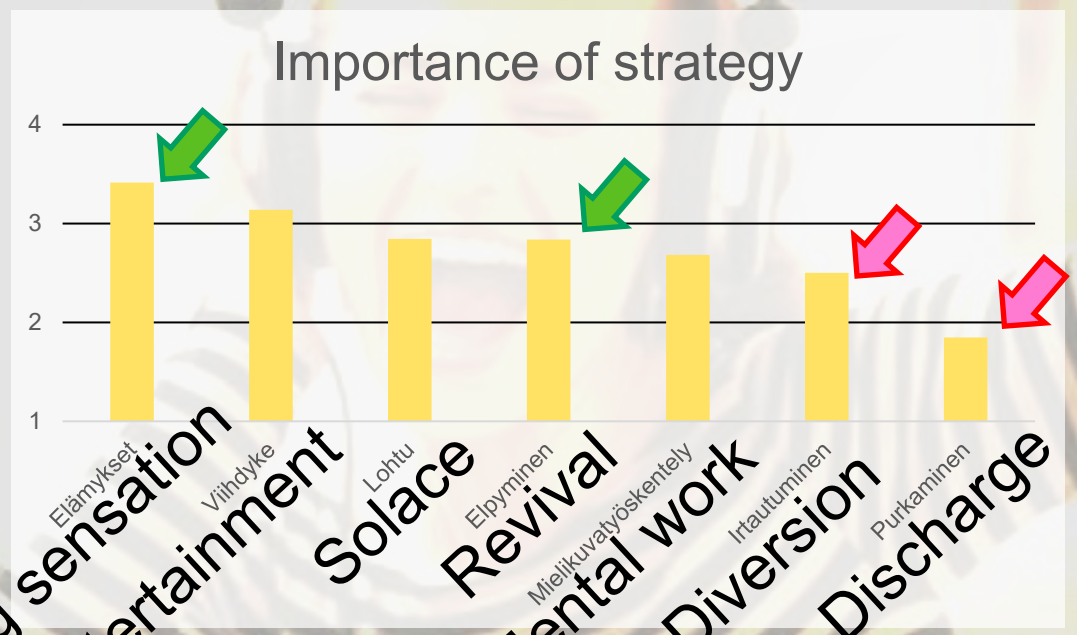
MALES AND FEMALES USE DIFFERENT STRATEGIES



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



PRINCIPALS USE SUCCESSFUL STRATEGIES



- ➡ 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

A photograph of a modern library interior. The space is filled with white bookshelves on multiple levels. A person is visible on a mezzanine level, looking towards the bookshelves. The lighting is bright and even. The text is overlaid on a semi-transparent dark grey background.

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.