

Thesis

Connection between Motor Learning or Motor Consolidation with Sleep, Physical Activity and Cognitive Function – Analysis of a Dataset

Description

Several factors are able to influence memory processes linked to motor learning and motor consolidation. While sleep is thought to play an important role in motor consolidation especially in declarative (explicit) motor memory, physical activity is often linked to improved consolidation. A Task, which can be modulated to utilize either the declarative or the procedural motor memory, is the Serial Reaction Time Task (SRTT). An existing dataset of young and healthy subjects can be analyzed with regard to different questions. Besides the behavioral data of the SRTT sleep protocols, questionnaires covering physical activity, sleepiness and sleep as well as a cognitive test battery were assessed.

Methods

Analysis of existing dataset containing:

Serial reaction time task (SRTT)

Questionnaires (IPAQ; ESS, PSQI)

Cognitive Test Battery

Potential research questions

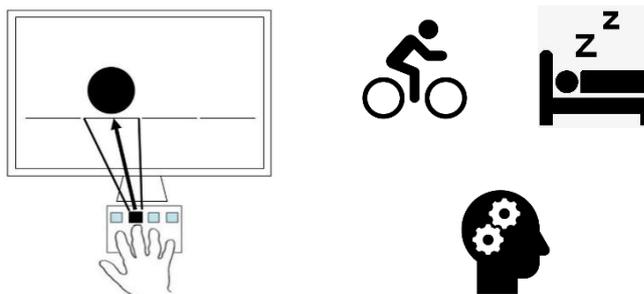
How are sleep or sleep quality linked to motor learning and motor consolidation?

Is there a connection between physical activity and motor learning or motor consolidation?

Can cognitive function predict the amount of motor learning or motor consolidation?

Contact

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Literatur

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