

Stress reactivity in insomnia

Submission date 03/10/2026	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 20/10/2026	Overall study status Completed	☐ Protocol
Last Edited 19/10/2026	Condition category Mental and Behavioural Disorders	☐ Statistical analysis plan
		☐ Results
		☐ Individual participant data
		☒ Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific, Public, Principal investigator

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Additional identifiers

Study information

Scientific Title

Sleep and brain plasticity: effects of stress and perceived insomnia

Acronym

Sleepemotion 5

Study objectives

RQ1: How sleep EEG characteristics (including the quality and continuity of REM sleep, sleep EEG spectral power, sleep stage transitions), cardiac activity during sleep and individual stress reactivity profiles relate to insomnia and sleep misperception in individuals having paradoxical

insomnia (underestimation of sleep time)?

RQ2: Does a pre-sleep relaxation exercise improve sleep in individuals with insomnia (including the subtype of paradoxical insomnia)?

RQ3: Does sleep-related memory consolidation facilitate the updating of affective social appraisals and how these are related to different brain and cardiac activity profiles during sleep and prior to sleep?

Ethics approval required

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Ethics approval(s)

Approved 20/06/2025, Ethical committee of medicine, University of Helsinki (Yliopistokatu 4, Helsinki, 00014, Finland; +358 (0)294129528; uni-help@helsinki.fi), ref: 2025/17

Primary study design

Interventional

Allocation

Randomized controlled trial

Masking

Open (masking not used)

Control

Uncontrolled

Assignment

Crossover

Purpose

Basic science, Diagnostic, Treatment

Study type(s)

Health condition(s) or problem(s) studied

Insomnia

Interventions

1. Yoga nidra audio prior to sleep in a within subject cross-over design
2. Control condition: no audio

Random allocation to order Night A and Night B using simple randomization

Intervention Type

Behavioural

Primary outcome(s)

1. Sleep quantity and quality measured using sleep EEG at two consecutive nights
2. Memory performance measured using computerized tasks at before and after each night

Key secondary outcome(s)

Completion date

15/10/2026

Eligibility

Key inclusion criteria

1. Self-declared insomnia by ICD-10 criteria
2. Controls: no insomnia

Healthy volunteers allowed

Yes

Age group

Adult

Lower age limit

18 Years

Upper age limit

55 Years

Sex

All

Total final enrolment

74

Key exclusion criteria

1. Other chronic sleep disorder
2. Medication that affects sleep

Date of first enrolment

01/09/2025

Date of final enrolment

30/06/2026

Locations

Countries of recruitment

Finland

Sponsor information

Organisation

Research Council of Finland

ROR

<https://ror.org/05k73zm37>

Funder(s)

Funder type

Funder Name

Research Council of Finland

Alternative Name(s)

Academy of Finland, Suomen Akatemia, Finlands Akademi, AKA

Funding Body Type

Government organisation

Funding Body Subtype

Research institutes and centers

Location

Finland

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available