

Gamma-Sleep: Checklist

Session 2 (sleep, control)

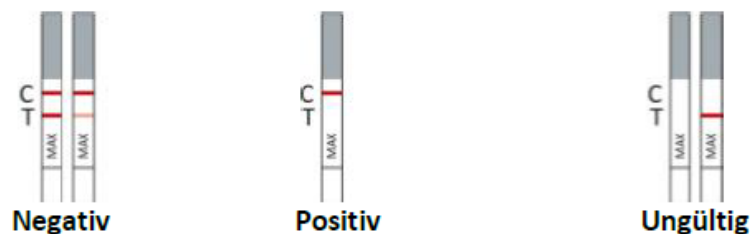
Preparation

- Participant arrives, is led to one of the lab rooms
—> *note room number & time of arrival in lab book*
- Urine test:
 - Give participant a new container, show the way to the toilet, ask for a urine probe
 - (If not possible, take test after setup)
 - Conduct test, evaluate after 5 min

—> *if invalid: repeat*

—> *if 1 or more tests are positive: ask participant & if in doubt, repeat*

—> *if final result is positive for any test: send participant home, reschedule*



- Dim the room lights
- Give time to complete usual sleep routine, ask to let us know when they're ready

EEG setup

- Locations:
 - put on cap M / L, adjust with measuring band
 - mark Cz, PO3, POz, PO4, O1, Oz, O2, F3, F4, C3, C4
 - if marks are difficult to perceive (e.g., due to darker skin): measure distances in cm
 - take cap off

- Electrodes:
 - clean spots with alcohol & abrasive gel, then apply gold cup electrode with paste & patch
 - ground at forehead (cover with sticker)
 - EOG: lower left, upper right (cover with sticker)
 - EMG: left & right (cover with sticker)
 - A1, A2 (cover with sticker)
 - connect wires to correct positions in head box:
 - same: Cz, O1, O2, C3, C4, F3, F4, A1, A2
 - different:

| Real electrode position | Connect to headbox |
|-------------------------|--------------------|
| Fpz | Z (ground) |
| PO3 | P3 |
| PO4 | P4 |
| POz | Pz |
| Oz | Fz |
| Left EOG | PG1 |
| Right EOG | PG2 |
| Left EMG | |
| Right EMG | |

- Open participant profile in Polaris, start calibration
 - visual check with notch on: any noisy channels?
 - impedance check: EEG channels below 15 kOhm?



Ask participant: anything else needed (toilet, water...)? If so, please do it now

Recording start

- Put mask on (not attached)

- Turn lights out → mark in Polaris
- While still sitting on chair: 10 min recording during wakefulness
 - announce half-time after 5 min, prevent from falling asleep
- After 10 min: lead participant to bed (briefly lift mask)

Overnight

- If the participant wakes up and needs to get up, remove the sleep mask and unplug the head box → *when they are ready to go back to sleep, put sleep mask back on & plug the head box in again!*
- Every ~15 min, check the PSG output and video. Only wake participant up if:
 - Both sides of an electrode pair are loose (e.g., F3 AND F4, or left AND right EOG) → redo both channels. If for example F3 is noisy but F4 is ok, don't do anything.
 - More than 2 channels in the occipital area are loose (e.g. PO3, POz AND Oz are bad) → redo those channels. If only one or two are noisy, don't do anything.
 - They have removed the sleep mask, possibly unconsciously → put it back on.
- If the participant is taking a long time to fall asleep, or if they wake up during the night and stay awake for a longer period, that is ok.
- Exception: if they ask to abort the experiment (e.g., because they cannot sleep), *call Laura*.
 - *Laura*: Before terminating, ask them if they would like to give it another chance, and remind them that if they choose to terminate a) we won't be able to use their data; b) they will not receive any payment.
 - If they confirm, remove everything and let them leave.
→ *note time and reason for termination in lab book*



If anything happens during the night that could be relevant for the study, even if it may seem minor, please note it in the lab book.

Morning

- If participant wakes up early and wants to get up, remove setup
—> *note time in lab book*
- Else, wake participant up after 8 hours, remove setup
- Let participant complete their morning routine (toilet etc), then give them the Sleep Quality Scale
- Confirm with them that they will return to the lab at the end of the day (same time as last evening), then they may leave