

Accelerometer-measured physical activity during office and remote workdays

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Background

- Pre-pandemic studies suggested that teleworkers report **lower physical activity levels** than in-office workers
 - due to e.g., lack of active commuting, longer working hours, and increased work-related sitting (1,2,3)
- More recent studies have found **higher daily sedentary time** when the work is done at home vs. at the office (4,5)
 - Also shorter activity bouts (<5 min) when working from home vs. office (5)
- Does remote work make office workers even more sedentary?
 - Pandemic may have affected on previous findings
 - Post-pandemic studies are scarce
 - Long-term health effects of more passive way of working?

WORKDAY-Study

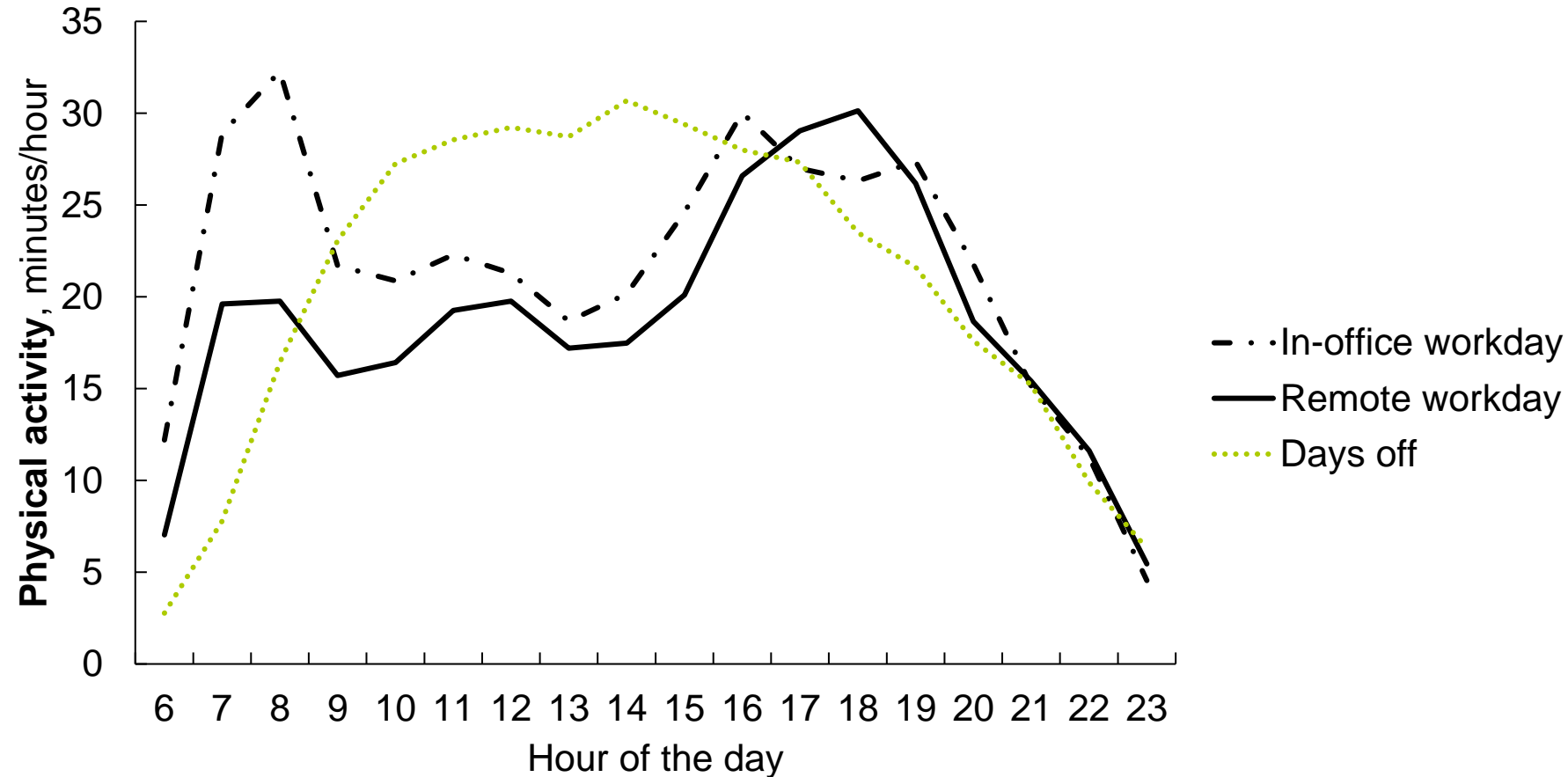
- Recruitment of hybrid workers from the campus area
- Eligible participants were those office workers who were able to consent to remote work **at least two days per week**
- **The study aimed to compare daily physical activity during remote and office workdays**
- **99 hybrid workers** (83% women, mean age 42 ± 10 y) were able to wear accelerometers and respond to the study questionnaire

Accelerometer measurements



- Physical activity and sedentary behavior were measured with thigh-worn, triaxial SENS motion® accelerometer for 7 days
- Outcomes: Daily physical activity and sedentary time
 - **Sedentary time** (*sitting or lying*)
 - **Light physical activity** (*standing, sporadic walking, walking*)
 - **Moderate-to-vigorous PA** (*brisk walking, running, cycling*)
- Exposures from the daily logs:
 - workday (vs. day off)
 - work mode (office vs. remote)
 - worktime (vs. leisure time)

Daily physical activity during office vs remote workday



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On average, remote worktime accumulated 31 (95% CI 12-51) minutes higher sedentary time compared to in-office worktime. No differences in working hours.

Comments on the preliminary findings

- Remote worktime includes more sitting
 - *More LPA (including standing) and MVPA at the office*
- Breaking up sitting more frequently during remote work but not diminishing total sedentary time
 - *Too short active bouts?*
- No differences during leisure time, except for MVPA
 - *Active commuting not completely compensated?*
- These interesting findings will be complemented with interview data on facilitators/barriers to break up sitting at remote environments

WORKDAY

www.utu.fi/workday

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Thank you!

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