ANNUAL MEETING AND CONFERENCE

OF THE INTERNATIONAL NETWORK OF TIME-USE EPIDEMIOLOGISTS (INTUE)

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The Olomouc astronomical clock built in 15th century

Final Programme and Book of Abstracts

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International Network of Time-Use Epidemiologists (INTUE)

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TRANSPORTATION

Trains from Prague to Olomouc

Olomouc is located 250 km South-East of Prague. The fastest and cheapest way to get from Prague to Olomouc is by rail. Trains from Prague to Olomouc depart every 20–30 minutes (estimated travel duration: 2 hours and 10 minutes; one-way ticket price starts at €7). Buses depart every 1–3 hours (estimated travel duration: 4–5 hours; one-way ticket price starts at €8). If you are traveling by train, we would recommend you to book your train tickets with one of the following providers:

- Student Agency | Regio Jet https://www.regiojet.com/
- LeoExpress https://www.leoexpress.com/en
- Czech Railways https://www.cd.cz/en (Pendolino trains are recommended)
- IDOS Train Transport Planner https://jizdnirady.idnes.cz/vlaky/spojeni/

social, emotional, and physical development outcomes. However, time spent in MVPA, relative to other movement behaviours, was significantly beneficially associated with sociability (B=0.87, p=0.03). Movement behaviours were not associated with physical development outcomes and most social and emotional development outcomes in this sample. This is in contrast with our previous research findings in this sample, for motor and cognitive development outcomes. Future research should confirm whether different development outcomes in this age group are more sensitive to movement behaviour compositions.

8. Spinal health and sitting: a link to the 24-hour movement continuum

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Prolonged sitting is widely recognized as a risk factor for low back disorders and low back pain. Several harmful mechanisms have been proposed, affecting intervertebral discs, posterior lumbo-pelvic ligaments and fasciae, and muscles of the lumbo-pelvic-hip complex. Sitting position is commonly accompanied with some degree of lumbar flexion while in the (semi)static conditions. If such posture is maintained for prolonged periods of time, the spinal tissues slowly deform, leading to a reduction of tissue resistance to loads and eventually (micro)trauma. The tissue strain when sitting is highly dependent on the sitting posture (slouched, upright, reclined etc.) and individual's spinal tissue health. However, loading of the passive tissues (dynamic loading is favourable) and muscle activation during engaging in physical activity is essential for maintaining and strengthening the tissues' health. Then a period of rest (i.e. unloading) must be followed, so that the adaptive tissue response could occur. Also, it was shown that insufficient sleep time, high levels of sedentary behaviour, physical inactivity and high levels of physical activity make the existing low back pain worse, while associations with first-time low back pain are not clear. The studies often investigated a single behaviour in isolation. Since there is a strong rationale based on biological plausibility and epidemiological studies, and because time is finite during the day, further studies should take into account all movement behaviours in a 24-hour period. To the best of our knowledge, little is known about the combined effect of time spent in sleep, sedentary behaviour and physical activity on low back pain and low back disorders.

9. Bidirectional investigation of movement profiles and adiposity in children

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The aim of this study was to investigate directions of association between combined-sensing estimates of movement behaviours with total and site-specific adiposity in children from a disadvantaged location, and to examine heterogeneity of associations by ethnicity. The Birmingham healthy Eating & Active lifestyle for children Study (BEACHeS) and its full-trial equivalent the West Midlands ActiVe lifestyle and healthy Eating in School children (WAVES) project are controlled trials of obesity prevention programmes conducted in a socioeconomically diverse and multi-ethnic (primarily white British and South Asian) population of children aged 6-8 years. The trials share common methods and together contain data for >1800 children who were followed for up to 2.5y. At baseline and follow-up habitual