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generally healthy, and experiencing typical development. Children were ineligible if they had a learning or physical disability, known motor delay, or a diagnosed medical or psychological condition (e.g., conduct disorder) that would affect the results of the study.

Study protocol

Prior to participation in the study, Directors of participating ECEC centres provided electronic or paper versions of information sheets and consent forms to all eligible children's parents/carers. Following informed consent, parents/carers provided demographic information and other data via surveys. After verbal consent, trained data collectors completed assessments with children in a quiet area of the ECEC centre, away from the main group of children but within the supervision of the educators.

Measures

Physical activity

Physical activity was measured objectively using accelerometers (ActiGraph GT3X+). The ActiGraph has established acceptability, validity and reliability in preschool children [28, 29]. Children wore the accelerometer around their waist on an elastic belt at the right hip, anterior to the iliac crest, 24-h/day for one week. Non-wear time was defined as ≥ 20 min of consecutive "0" counts, and children's physical activity data were included in analyses if they had a least 1 day of valid data (\geq

causes, children are shown a picture, read an accompanying story, and are asked to select an emotional outcome (presented as four emotion faces) that would be provoked by

better on TEC than those who did not (mean difference = 1.41; 95% CI = 0.36, 2.47).

The associations between meeting combinations of movement behaviour guidelines and TEC and ToM are report in Table 3. Differences were consistently in favour of children meeting a combination of guide-

did not approach statistical significance (mean difference = 0.28; 95% CI = -0.002, 0.48, $p = 0.051$). Although TEC performance was higher among children meeting the 24-h movement guidelines compared to those who did not, the difference was not statistically significant

points to define physical activity, and a longer sampling frequency (60s vs. 15 s) for a portion of the sample. These factors may have contributed to the lower proportion of children meeting the physical activity guideline in that study [42], compared to our study and those in Canadian [43] and Australian toddlers [44]. Irrespective of this difference, strategies and programs to promote adherence to the guidelines among young children are warranted, particularly to reduce recreational screen time and support children in meeting the guideline of ≤ 1 h/day.

such as sleep disturbances or quality, the quality, type, or content of screen time [47, 48], the timing of television viewing or exposure to background television, or

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