



Figure 17 Daily physical activity hourly patterns of the 1001 patients with chronic obstructive pulmonary disease during weekdays (A) and weekend days (B). Data pooled per hour as mean (95% confidence intervals).

Table V Daily physical activity measures during weekdays in patients with COPD.

Physical activity measure	Very light intensity	Light intensity	Moderate-to-vigorous intensity
<b>General physical activity</b>			
Time, min·day <sup>-1</sup>	803 (710 – 901)	142 (92 – 194) <sup>†</sup>	52 (26 – 99) <sup>†‡</sup>
EE, METs·min·day <sup>-1</sup>	1032 (822 – 1327)	435 (291 – 655) <sup>†</sup>	267 (132 – 550) <sup>†‡</sup>
<b>≥10-minute bouts of physical activity</b>			
Time, min·day <sup>-1*</sup>	657 (539 – 780)	7 (0 – 22) <sup>†</sup>	6 (0 – 22) <sup>†</sup>
Frequency, bouts·day <sup>-1*</sup>	18 (16 – 21)	1 (0 – 2) <sup>†</sup>	1 (0 – 2) <sup>†</sup>
Average duration, min·bout <sup>-1*</sup>	32 (27 – 39)	13 (12 – 14) <sup>†</sup>	14 (12 – 17) <sup>†‡</sup>
EE, METs·min·day <sup>-1*</sup>	847 (626 – 1168)	26 (0 – 77) <sup>†</sup>	36 (0 – 132) <sup>†</sup>

Data expressed as median (interquartile range). EE: energy expenditure; MET: metabolic equivalent of task. \*The time, frequency and EE in bouts of physical activity were averaged out over the total number of valid days, while the duration of bouts of physical activity was averaged out over the total number of bouts available. †P<0.05 vs very light intensity; ‡P<0.05 vs light intensity.

#### 4.4.3 Stratification for Generic and COPD-specific Characteristics

In general, patients of older age, female sex, LTOT users, lower diffusion capacity of the lung for carbon monoxide (DLCO), higher mMRC dyspnoea grade, higher BMI, higher ADO index (including age, dyspnoea, and airflow obstruction), higher GOLD grade and patients from GOLD group D spent the smallest daily total time and lowest daily total EE in moderate-to-vigorous intensity (Table XX-Table XXVIII in the appendix). Daily physical activity hourly patterns after stratification for the abovementioned characteristics are presented in Figure 18-Figure 20, showing a significant influence of age, BMI, mMRC dyspnoea grades, and ADO index scores, as there was little or no overlap between the 95% confidence intervals of the hourly patterns. The AUC-values for these parameters varied between 0.25 and 0.36 (Table XIX in the appendix). The influence of GOLD grades or GOLD groups on these patterns was small. Moreover, only weak associations existed between FEV<sub>1</sub> (% predicted) and the time in activities of very light, light, and moderate-to-vigorous intensities (Figure 21).