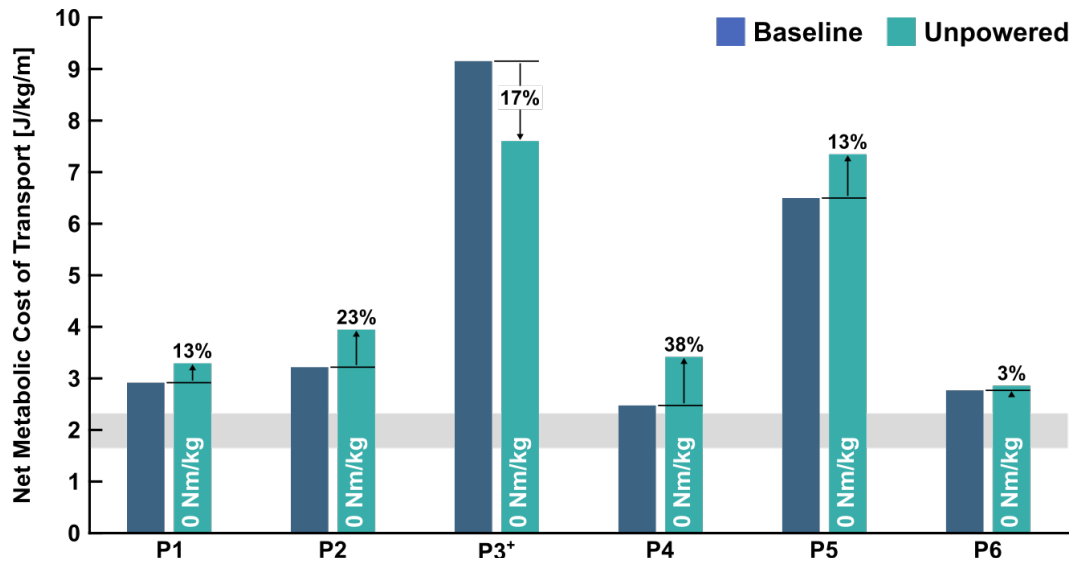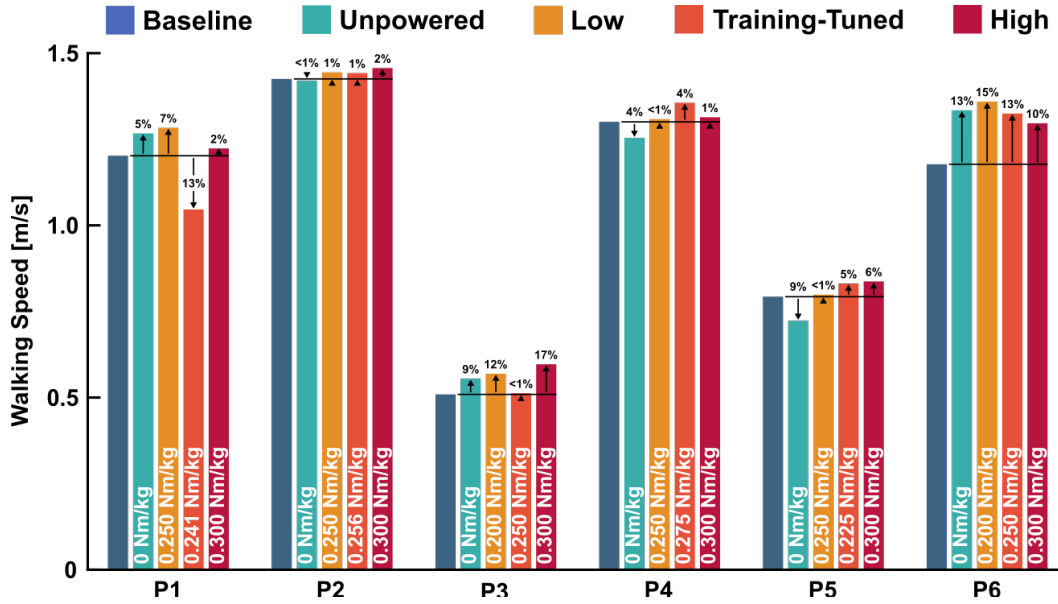SUPPLEMENTAL TABLE I
FINAL VISIT CONDITION TESTING ORDER
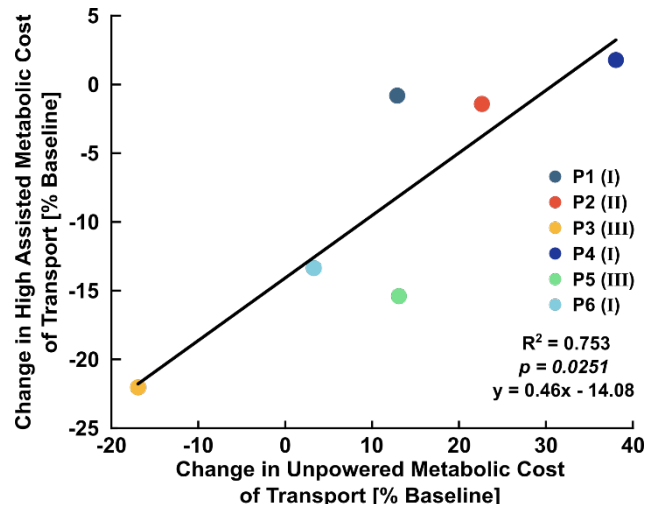
Order	P1	P2	P3	P4	P5	P6
1	Baseline	Unpowered	Baseline	Baseline	Unpowered	Baseline
2	Training-Tuned	High	Training-Tuned	Low	Training-Tuned	High
3	Low	Low	Low	Training-Tuned	Low	Training-Tuned
4	High	Training-Tuned	High	High	High	Low
5	Unpowered	Baseline	Unpowered	Unpowered	Baseline	Unpowered

Supplemental Fig. 1. Net metabolic cost of transport for baseline and unpowered conditions tested during the post-training or supplemental visit. Gray bar indicates typical range of net metabolic cost of transport reported for unimpaired individuals from 9 years old to adulthood [28]. + P3 wore AFOs heavier than the ankle sub-assembly during the baseline condition and consequently experienced a reduction in energy expenditure during the unpowered condition.

Supplemental Fig. 2. Self-selected walking speed for baseline, unpowered, and assisted conditions tested during the post-training visit.

Supplemental Fig. 3. Relationship between change in net metabolic cost of transport during high assistance condition walking and change in metabolic cost of transport during walking with the exoskeleton unpowered. The metabolic cost associated with wearing the exoskeleton explained 75% of the variance in the change in metabolic cost of transport during walking with assistance relative to baseline. Roman numerals in parentheses indicate participant GMFCS level.