## Supplemental Digital Content 3

Table. Time duration (ms) of and angular velocity ( $\% / \mathrm{s}$ ) at which the plantarflexors performed negative work prior to push-off

| Age group | Variable | Level walking |  |  | Uphill walking |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.1 m/s | 1.4 m/s | $1.7 \mathrm{~m} / \mathrm{s}$ | $1.1 \mathrm{~m} / \mathrm{s}$ | 1.4 m/s |
| Y | Time | $47.7 \pm 3.4$ | $38.7 \pm 7.9$ | $32.3 \pm 7.6$ | $44.3 \pm 8.7$ | $36.7 \pm 9.2$ |
|  | Velocity | $47.0 \pm 7.4$ | $49.0 \pm 7.1$ | $47.5 \pm 9.5$ | $39.7 \pm 7.8$ | $41.4 \pm 9.3$ |
| O | Time | $45.7 \pm 4.7$ | $39.2 \pm 4.9$ | $29.6 \pm 8.9$ | $40.3 \pm 13.0$ | $33.4 \pm 8.9$ |
|  | Velocity | $46.2 \pm 7.2$ | $48.8 \pm 6.5$ | $54.5 \pm 9.1$ | $35.8 \pm 10.0$ | $45.8 \pm 8.0$ |

Values are mean $\pm$ SD. $\mathrm{Y}=$ young adults, $\mathrm{O}=$ older adults. Time duration (age: $\mathrm{F}_{1,38}=0.493$, $\mathrm{p}=0.487$ ) and angular velocity (age: $\mathrm{F}_{1,38}=1.426, \mathrm{p}=0.240$ ) across the five walking conditions were comparable between age groups. Note. The fast (i.e., $1.7 \mathrm{~m} / \mathrm{s}$ ) uphill walking condition is not included in the table as the amount of negative work is negligible in both age groups.

