

Inclusion and exclusion criteria

Inclusion criteria for healthy individuals:

Participants will be recruited if they -

- (1) age between 21-70 years.
- (2) weight < 100kg.
- (3) height between 160-190 cm.
- (4) have intact, normal neurological and musculoskeletal functioning to perform the experimental protocols.
- (5) are free of lower-body muscle and joint injuries or abnormalities.
- (6) do not suffer from psychiatric illness or cognitive deficits that hinder learning.
- (7) give informed consent.
- (8) students can also participate if they are 21 years old or older.

Exclusion criteria for healthy individuals:

Potential participants will be excluded if they –

- (1) have cognitive impairment.
- (2) have uncontrolled epilepsy.
- (3) have uncontrolled psychiatric illness.
- (4) have tumors.
- (5) have fractures.
- (6) have history of osteoporosis (spine and hip z score < -2) .
- (7) have heterotopic ossifications.
- (8) have acute tendon or joint pathology of the upper or lower limbs.
- (9) have severe lower limb dysmetria.
- (10) have joint stiffness in joints of the lower limbs.
- (11) have a cardiorespiratory pathology that limits their ability to exert themselves.
- (12) have acute arterial or venous vascular disease.
- (13) have orthostatic hypotension.
- (14) have dermopathies. Pressure ulcers.
- (15) have infections in general.
- (16) are younger than 21 years of age or older than 70 years of age.

(17) are prisoners.

(18) are pregnant.

(19) height of the participant is not between 160-190 cm or the weight is larger than 220 lbs (100 Kg).