



## Student's full name:

## MODULE BIOMECHANICS OF GAIT

Didactic Unit C: HOW DO I ASSESS GAIT?

C. 3. What are the advantages of the use of instrumental techniques versus scales and physical examination to assess gait?

## **ACTIVITY ONE**

According to Hee-jae Kim et al. (2016), when assessing walking speed in people, the measurement has better reliability when we assess walking over long distances and fast speed. To contrast this experiment, you will carry out the following activity:

- 1. Define a walkway in the space you have available (a corridor in the university or home) of 5, 7 and 10 meters long. Put a mark on the floor or a cone at the beginning and end of the hall.
- 2. Ask a young and an older person to walk each of the corridors three times at a slow, comfortable, or self-selected and fast speed. Record the time it takes them to go through each of the corridors with a stopwatch.
- 3. Write down the records and calculate the speed (d/t) in the table below.

## Answer the following questions:

- 1. Compare the repeatability of the speeds obtained between the young and the old person. In both cases were the repetitions the same?
- 2. Is there a difference in the repeatability of the measurements between the walkway within the performance of each subject?
- 3. Does the repeatability of the measurements vary if the person walks slowly, fast or at a comfortable speed?
- 4. Explain what you think the differences in the repeatability of the measurements are due to.

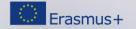












		3m walkway		7m walkway		10m walkway		
		Time	Gait speed	Time	Gait speed	Time	Gait speed	
Partici	pant 1: young p	erson	Speeu		эрсец		Speeu	
Slow speed	First repetition							
	Second repetition							
	Third repetition							
Comfortable speed	First repetition							
	Second repetition							
Comf	Third repetition							
Fast speed	First repetition							
	Second repetition							
	Third repetition							
Participant 2: older person								
Slow speed	First repetition							
	Second repetition							
	Third repetition							
Comfortable speed	First repetition							
	Second repetition							
	Third repetition							













Fast speed	First repetition			
	Second repetition			
	Third repetition			

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