

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
Participant 1: young 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						
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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