Motor development



What is motor development?

Motor development refers to the continuous, agerelated process of change in movement and motor behaviour. Many factors contribute to the development of motor behaviour, including the characteristics of the individual, including both physical and affective components, the culture and environment of the individual and specific task related components.

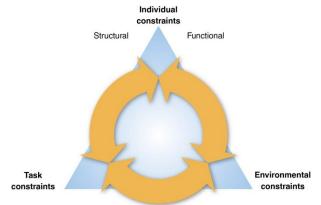
Motor development is important to take in to account and understand as our ability to perform tasks depends on our developmental position. For example, the youngest and oldest learners in a class at school will have almost a years' worth of growth, maturation and development between them. This can have a huge influence on the motor behaviour of the learner, and the older learner may significantly impact the younger learner's ability and desire to succeed if they are constantly 'dominating' in an activity due to their advanced developmental position.

Movement onset

Onset of movement can be delayed or enhanced by the environments and interactions that a person engages in. An individual that engages in diverse movement opportunities earlier in life is more likely to engage in physical activity throughout life. Movement can also be determined by our physical growth and maturation, with the bodies we inhabit a huge factor in movements that we decide to pursue. During adolescence, movement proficiency can often regress as individuals enter a time of increased height and weight growth, causing us to be 'unfamiliar' with how to move our bodies.

Constraints to movement

A useful model of motor development to understand was developed by Karl Newell in 1986. Newell's model of motor development shows us that in order to understand movement we must consider the relationships between the characteristics of the individual mover, their surroundings and their purpose for moving. From the interaction of all these characteristics, specific movements emerge.



Newell defined the points of his triangle as 'constraints', but it's important not to consider constraints as negative. Constraints provide channels from which movements most easily emerge, like how a riverbed acts as a constraint to water by restraining it from flowing anywhere and everywhere, but also channelling it to follow a specific path. Movement constraints are characteristics that shape movement. They restrain and channel movement to a particular time and place; they give movement a particular form.

This model helps us visualise the dynamic, constantly changing interactions within motor development that occur due to the influence of many factors within a person's life.