Explain the relationship that neurons have to motor learning and also electrical ...

Health & Medicine



Explain the relationship that neurons have to motor learning and also electrical impulses A neuron may be defined as the fundamental building block upon which the whole nervous system is based. There is a lot of similarity between these nerve cells and other kinds of cells in the body, but neurons' ability to send the information to all parts of the body differentiates them from other cells. This property of the neurons lays the basis of their relationship with the motor learning. Motor learning is a process wherein the brain makes use of the errors of movement in order to adjust the planning of movements that are to be made in the future. "The processes that underlie...nature of the capability itself - are probably highly complex phenomena in the central nervous system, such as changes in the ways sensory information is organized or changes in the patterning of muscular action" (Schmidt and Lee, 2005, p. 303). Neurons being the basic building block of the central nervous system are the fundamental control units of motor learning. Neurons also have a very strong relationship with the electrical impulses. Messages, through neurons are sent electrochemically. In this process, the chemicals or ions are responsible for the generation of an electrical impulse. Neurons are the kind of cells that can be excited electrically. This essentially speaks of the neurons' tendency to transmit the impulses of electrical nerves. Owing to the fact that impulses are generated by the functions that take place in the cell membrane, it is important to revise their properties in order to perceive the nerve impulse. References:

Schmidt, R. A., and Lee, T. D. (2005). Motor control and learning: a

behavioral

emphasis. USA: Human Kinetics.