Flex Therapist CEUs

Biofeedback in Rehabilitation

Background

1. All of the following physiological systems of the body can be measured to provide biofeedback, except:

A. The neuromuscular system
B. The skeletal system
C. The respiratory system
D. The cardiovascular system

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2. Biomechanical biofeedback involves measurements of:

A. Movement
B. Postural control
C. Force
D. All of the above

Physiological biofeedback

3. Electromyography biofeedback can be used to either increase activity in weak or paretic muscle or it can be used to facilitate a reduction in tone in a spastic one.

A. True
B. False

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4. Real-time ultrasound imaging biofeedback is capable of giving immediate real-time visual feedback of muscle activity by allowing the user to directly see the muscle changing shape/length on a display.

A. True
B. False

Biomechanical biofeedback

5. All of the following are true pertaining to inertial based sensing biofeedback, except for:

A. Young participants were able to react to the biofeedback while walking and performing a dual task at the same time.
B. The elderly reduced their trunk sway with biofeedback while walking normally.
C. When a cognitive or a motor task was added, the elderly were equally capable as the young participants in reacting to the biofeedback and reducing truck sway.
D. All of the above are true.

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6. Force plate systems measure the ground reaction force generated by the body and can be used to give feedback on:

A. Balance
B. Movement
C. Gait
D. All of the above

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7. When investigating the effects of using a video camera to provide visual feedback to participants with winged scapula during a push up exercise, visual biofeedback resulted in decreased activity of the serratus anterior muscle and increased activity of the upper trapezius muscle.

A. True
B. False

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8. All of the following are true for video game-based exercises, except for:

A. Video game-based biofeedback is by far the most popular form of biofeedback.
B. Center of pressure biofeedback controlled by video game-based exercises could improve dynamic balance control in cases of various neurological disorders.
C. Center of pressure-controlled video game-based exercise regimes motivate subjects to increase their practice volume and attention span during training.
D. Interacting with a game incorporating simple visual feedback results in improved exercise accuracy compared to performing the exercise from memory or with limited feedback in the form of an instructional video demonstration.
