

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
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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
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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.**
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