

Heart Rate Variability Biofeedback: Principles and Practice 2-Day Conference

Description

Heart Rate Variability Biofeedback: Principles and Practice teaches the Biofeedback Certification International Alliance's (BCIA's) 16-hour HRV Biofeedback Certificate of Completion Didactic.

Attendees who complete this 2-day conference, may apply to BCIA to take an online BCIA exam if they can demonstrate that they have satisfied the equivalent of 3 hours of ethics instruction in the past 5 years (e.g., licensure as a Physical Therapist, Psychologist, or Physician). The exam application costs \$25 for BCIA certificants and \$50 for non-certificants. Applicants who pass the exam will receive a BCIA Certificate of Completion in HRV Biofeedback and 15 hours of continuing education for BCIA recertification.

Heart Rate Variability Biofeedback: Principles and Practice Part I (7.5 hours)

1. Cardiac anatomy and physiology (1 hour)
 - A. How the ECG is generated
 - B. Sympathetic and parasympathetic influences
 - C. Heart-brain interaction

2. Respiratory anatomy and physiology (1 hour)
 - A. The functions of breathing
 - B. The respiratory cycle
 - C. Muscle involvement in breathing
 - D. The Bohr effect
 - E. Functional and dysfunctional breathing behaviors

3. Autonomic nervous system anatomy and physiology (.5 hour)
 - A. Three autonomic branches
 - B. The vagus nerves

4. Heart rate variability (2 hours)
 - A. The meaning of HRV
 - B. The sources of HRV
 - C. Factors that influence HRV
 - D. Correlates of low and normal HRV
 - E. The benefits of increased HRV

5. HRV instrumentation (3 hours)

- A. Blood volume pulse (BVP)
 - 1. Source
 - 2. PPG sensor
 - 3. Signal
 - 4. Placements
 - 5. Tracking test
 - 6. Artifacts

- B. The electrocardiogram (ECG)
 - 1. Source
 - 2. ECG sensor
 - 3. Signal
 - 4. Placements
 - 5. Tracking test
 - 6. Artifacts

- C. Pneumograph
 - 1. Source
 - 2. Respiration sensor
 - 3. Signal
 - 4. Placements
 - 5. Tracking test
 - 6. Artifacts

Heart Rate Variability Biofeedback: Principles and Practice Part II (7.5 hours)

- 6. HRV measurements (2 hours)
 - A. Time domain measurements and their meaning, properties, and correlates
 - B. Frequency domain measurements and their meaning, properties, and correlates
 - C. Brief versus 24-hour Holter monitoring
 - D. How to interpret HRV measurements

- 7. HRV biofeedback strategies (4 hours)
 - A. How to explain HRV biofeedback to a client
 - B. How to assess breathing
 - C. How to measure the resonance frequency
 - D. How to teach resonance frequency breathing
 - E. How to structure an HRV biofeedback training session
 - F. How to augment training with emotional regulation strategies
 - G. HRV biofeedback side effects and contraindications
 - H. Practice assignments to promote generalization

8. HRV biofeedback applications (1.5 hours)

A. Clinical applications

B. Optimal performance applications