
Professional Certificate in Applied Neuroscience for Coaching

Resilience

****Amygdala****

The amygdala is a part of the brain responsible for processing emotions, particularly fear and anxiety. It plays a crucial role in the body's stress response and is linked to the formation and storage of memories related to emotional events.

****Autonomic Nervous System (ANS)****

The autonomic nervous system is the part of the nervous system that controls involuntary actions, such as heart rate, breathing, and digestion. It has two subdivisions: the sympathetic nervous system, which prepares the body for action, and the parasympathetic nervous system, which promotes relaxation and restoration.

****Cognitive Behavioral Therapy (CBT)****

Cognitive Behavioral Therapy is a type of psychotherapy that focuses on changing negative thought patterns and behaviors. It is often used in coaching and therapy to help individuals manage stress, anxiety, and depression.

****Default Mode Network (DMN)****

The default mode network is a network of brain regions that are active when an individual is not focused on the external environment. It is associated with mind-wandering, introspection, and self-referential thinking.

****Emotional Intelligence (EI)****

Emotional intelligence refers to an individual's ability to understand and manage their own emotions, as well as the emotions of others. It includes skills such as empathy, self-awareness, and social skills.

****Executive Functions****

Executive functions are a set of cognitive processes that are responsible for goal-directed behavior, including planning, organization, attention, and self-control.

****Hippocampus****

The hippocampus is a part of the brain responsible for learning and memory. It plays a crucial role in the formation of new memories and the consolidation of existing memories.

****Limbic System****

The limbic system is a group of brain structures that are involved in emotion, behavior, motivation, long-term memory, and olfaction. It includes the hippocampus, amygdala, hypothalamus, and cingulate gyrus.

****Mindfulness****

Mindfulness is the practice of being present and fully engaged in the current moment. It involves paying attention to one's thoughts, feelings, and physical sensations without judgment.

****Neuroplasticity****

Neuroplasticity refers to the brain's ability to change and adapt in response to new experiences. It includes processes such as synaptic plasticity, neurogenesis, and neural reorganization.

****Parasympathetic Nervous System (PNS)****

The parasympathetic nervous system is the part of the autonomic nervous system that promotes relaxation and restoration. It slows down heart rate, reduces blood pressure, and promotes digestion.

****Prefrontal Cortex (PFC)****

The prefrontal cortex is the part of the brain responsible for higher-order cognitive processes, including decision-making, problem-solving, and planning. It is also involved in the regulation of emotions and social behavior.

****Resilience****

Resilience refers to an individual's ability to adapt and cope with adversity, trauma, or stress. It involves the use of cognitive, emotional, and behavioral strategies to bounce back from negative experiences and maintain well-being.

****Sympathetic Nervous System (SNS)****

The sympathetic nervous system is the part of the autonomic nervous system that prepares the body for action. It increases heart rate, blood pressure, and respiration, and mobilizes energy resources.

****Transcranial Magnetic Stimulation (TMS)****

Transcranial magnetic stimulation is a non-invasive brain stimulation technique that uses magnetic fields to stimulate or inhibit neural activity in specific brain regions. It is used in research and clinical settings to treat conditions such as depression and migraine.

****Working Memory****

Working memory is a cognitive system responsible for temporarily holding and manipulating information. It is involved in tasks such as language comprehension, problem-solving, and mental arithmetic.

****Glossary of Terms for Applied Neuroscience in Coaching****

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