
Professional Certificate in Applied Neuroscience for Coaching

Stress

Amygdala: A small almond-shaped structure in the temporal lobe of the brain that plays a key role in processing emotions, particularly fear and anxiety. It is responsible for the body's "fight or flight" response to stress.

Autonomic Nervous System (ANS): The part of the nervous system that controls involuntary actions, such as heart rate, digestion, and respiratory rate. It has two branches: the sympathetic nervous system, which prepares the body for action, and the parasympathetic nervous system, which conserves energy and promotes relaxation.

Cognitive Appraisal: The process of evaluating a situation to determine whether it is stressful and, if so, how to respond. This process involves assessing the demands of the situation and one's own resources and abilities.

Cortisol: A hormone produced by the adrenal glands in response to stress. It helps to regulate metabolism, immune function, and blood pressure, but chronic elevations in cortisol can have negative effects on health.

Eustress: A type of stress that is considered positive or beneficial. It can motivate and energize an individual, and is often associated with challenges and growth.

Fight or Flight Response: A physiological response to stress that prepares the body for action. It involves the release of hormones such as adrenaline and cortisol, which increase heart rate, blood pressure, and respiration.

General Adaptation Syndrome (GAS): A model of the body's response to stress developed by Hans Selye. It consists of three stages: alarm, resistance, and exhaustion.

Hippocampus: A structure in the temporal lobe of the brain that is important for learning and memory. It is particularly sensitive to the effects of stress hormones, and chronic stress can lead to hippocampal atrophy.

Homeostasis: The tendency of the body to maintain a stable internal environment, despite changes in external conditions.

Neuroplasticity: The ability of the brain to change and adapt in response to experience. This can include the formation of new neural connections, the strengthening of existing connections, and the creation of new neurons.

Perceived Stress Scale (PSS): A self-report measure of the degree to which an individual perceives their life as stressful. It is a widely used tool in research and clinical settings.

Resilience: The ability to recover from stress, adversity, or trauma. Resilient individuals are able to bounce back from challenges and maintain their well-being.

Stress: A state of physical, emotional, or mental tension or strain caused by adverse or demanding circumstances. It can have both positive and negative effects on an individual, depending on the type, duration, and intensity of the stressor.

Stress Management: The process of reducing or coping with stress through various techniques, such as relaxation, exercise, and cognitive restructuring.

Stress Response: The body's physiological and psychological response to stress. This can include the activation of the autonomic nervous system, the release of stress hormones, and changes in behavior and cognition.

Transactional Model of Stress: A model of stress that emphasizes the role of cognitive appraisal in determining an individual's response to a stressor. It was developed by Richard Lazarus and Susan Folkman.

Transcription Factors: Proteins that bind to DNA and regulate the transcription of genes. They play a key role in the body's response to stress.

Vagus Nerve: The tenth cranial nerve, which extends from the brainstem to the abdomen. It is a key component of the parasympathetic nervous system and is involved in regulating heart rate, digestion, and respiration.

Understanding the concept of stress and its related terms is crucial for coaches who are working with clients who may be experiencing stress in their personal or professional lives. By being familiar with these terms, coaches can better understand the underlying processes that contribute to stress and can help their clients develop effective stress management strategies.

One practical application of this knowledge is the ability to administer and interpret the Perceived Stress Scale (PSS) with clients. This self-report measure can provide valuable insights into an individual's subjective experience of stress and can help coaches tailor their interventions to the specific needs and concerns of the client.

Another practical application is the ability to explain the concept of eustress to clients. Many people view stress as inherently negative, but it is important to recognize that some types of stress can be beneficial and motivating. By helping clients reframe their understanding of stress, coaches can empower them to view challenges as opportunities for growth and development.

However, it is also important for coaches to be aware of the potential negative effects of chronic stress on physical and mental health. Exposure to prolonged or severe stress can lead to a wide range of negative outcomes, including anxiety, depression, and cardiovascular disease. Therefore, it is crucial for coaches to help their clients develop effective stress management strategies that can mitigate these risks.

One challenge for coaches is the need to balance the promotion of eustress with the prevention of chronic stress. While some stress can be beneficial, it is important for coaches to help their clients recognize when stress is becoming overwhelming and to provide them with the tools and resources they need to cope effectively.

In conclusion, stress is a complex and multifaceted concept that is central to the field of coaching. By familiarizing themselves with the related terms and concepts outlined in this glossary, coaches can deepen their understanding of stress and its effects on clients, and can develop the skills and knowledge needed to help clients manage stress effectively.