

Short questions-lesson#23

Arousal:

The stress response that is initially activated by alerting the organism to environmental change and readying it for action is called arousal.

- Arousal can be a result of anger

or fear and it prepares our body for an action.

Reticular Activating System:

The reticular activating system (RAS) denotes that part of the brainstem reticular formation which performs a crucial role in maintaining behavioural arousal, consciousness, and motivation.

Function of RAS:

- Screen information on its way to pass upward where it can be processed and acted upon
- It alerts the cerebral cortex

Lesson#24

What Is General Adaptation Syndrome (GAS)?

General adaptation syndrome, developed by a Hungarian endocrinologist, **Hans Selye**, is a theory used to explain how we respond to stress. Known as the 'Father of Stress', Hans Selye pioneered and was the first to provide a biological explanation for how we respond to stressful situations.

Hans Selye broke the process down into three separate and sequential stages, including the **alarm**, **resistance** and **exhaustion** stages. Not everyone experiences all three stages, which depends on how long or how often you may be exposed to stress.

Stress response phases:

1. Alarm reaction
2. Stage of resistance
3. Stage of exhaustion

Alarm reaction:

The alarm reaction stage is the ['fight or flight'](#) and is characterized by a release of adrenaline that causes increased heart rate, faster breathing, perspiration, and dilated pupils.



OR

In response to any stressor, either physical or psychological, the hypothalamus is activated, mediating the secretion of large amounts of ACTH by the pituitary. This ACTH, in turn, stimulates the adrenal cortex to secrete increased amounts of adrenal corticoids. In general, these hormones activate the organism allowing it to deal more adequately with its environment. This phase **is called alarm reaction.**

Stage of resistance:

At the resistance stage, the body tries to become balanced (a process called homeostasis) and begin to cope with the situation, mobilizing the body physically and psychologically. The organism in a sense is resisting the demands of the situation.

Stage of exhaustion:

If the organism is unsuccessful in its attempts to cope, or if the stress persists, the stage of exhaustion is reached. At this stage the adrenal gland can no longer respond to the stress by secreting adrenal corticoids and the organism has exhausted its ability to cope with the stressor.

Stress Appraisal Theory:

Stress appraisal refers to the process by which individuals evaluate and cope with a stressful event. Stress appraisal theory is concerned with individuals' evaluation of the event, rather than with the event. Stress appraisal comes in two forms, primary and secondary appraisal, which should be considered as two stages of appraisal or evaluation.

Primary appraisal:

Primary appraisal is the cognitive process that occurs when one is appraising whether an event is stressful and relevant to him or her. During this phase, a decision is made about whether the event poses a threat, will cause harm or loss, or presents a challenge.

Harm or loss is associated with damage that has already occurred, such as a death or a job loss. Threat is the possibility of a harm or loss in the future, such as sickness or poor job performance. Conversely, challenge consists of events that provide a person an opportunity to gain a sense of mastery and competence by confronting and overcoming a dilemma

Secondary appraisal:

It is the cognitive process that occurs when one is figuring out how to cope with a stressful event. During this process, a person decides what coping options are available. A harmful event requires immediate evaluation of coping options because it has already occurred, whereas threatening or challenging events allow one time to gather more information about events.