

What are Emotions?

Summary

- Many theories have been proposed to define and explain what emotions are, but there is no universally accepted definition.
- It is largely accepted that emotions involve a subjective experience, relating to memory and our processing of the external world, physiological reactions, and behavioural responses.
- Emotions are thought to be adaptive, serving an evolutionary purpose. We learn how to respond to situations based on previous emotional experiences.
- Emotions usually communicate a need that results in an adaptive action. They are messages that carry vital information to the brain in order to drive behaviour.
- Emotions have been categorised in different ways. It is useful to think of them in terms of primary emotions (instinctive, natural response to stimuli) and secondary emotions (learned or habitual responses to the primary emotions).

What are Emotions?

There is no universally accepted definition of an emotion, and the term is often used interchangeable with words like feelings and mood. According to the American Psychological Association (APA) these are slightly different.

A **mood** is “any short-lived emotional state, usually of low intensity”.

Feelings are a “self-contained phenomenal experience”. They are “subjective, evaluative, and independent of the sensations, thoughts or images evoking them...Feelings differ from emotions in being purely mental, whereas emotions are designed to engage with the world.”

An **emotion** is “a complex reaction pattern, involving experiential, behavioural and physiological elements, by which an individual attempts to deal with a personally significant matter or event”.

Emotions have three elements.

- subjective experience
- physiological response
- behavioural response

The **subjective experience** refers to how emotions are experienced uniquely by individuals depending on past experiences and the current context. Emotion is closely linked with memory, so an emotional reaction to a stimulus is shaped by stored memories of previous experiences and the associated emotions. Memories associated with an emotion are often stronger due to the simultaneous activation of the amygdala (emotion centre) and hippocampus (memory centre) in the limbic system. This link can cause an emotion to trigger specific memories and thoughts when it is experienced in the future.

A **physiological reaction** is the body's automatic, instinctive response to something. This includes changes in temperature, heart rate, breathing, perspiration, complexion, digestion and any other bodily processes. These processes are controlled by the autonomic nervous system, made up of two parts. The sympathetic nervous system controls physiological responses associated with the stress response, while the parasympathetic nervous system controls physiological responses in preparation for rest and relaxation.

The **behavioural response** refers to involuntary movements, sounds and facial expressions. These are different to the behavioural urges you can experience as a result of an emotion.

While it is widely agreed that emotions are linked to memory, physiological reactions and behavioural responses, the actual mechanisms of emotions are still debated and require further research. Physiological theories such as the James-Lange Theory suggest that the physiological responses create the emotions while others such as the Cannon-Bard Theory argue that the emotion and physiological response are experienced simultaneously. Cognitive theories such as the Schachter-Singer Theory and Cognitive Appraisal Theory suggest that thoughts and memories stimulate the physiological and emotional response while neurological approaches focus on the role of the brain and neurochemicals in generating emotions.

Function of Emotions

Emotions are an essential part of being human. They motivate our actions and drive our decision making, relationships and behaviour.

Charles Darwin proposed that emotions have an evolutionary purpose. They allow us to survive, adapt and reproduce. Repeated experiences of emotions are stored information that the brain can access when a similar situation occurs. Memories associated with strong emotions are significantly stronger, therefore, when we experience fear, our brain is able to access previous memories of fear in order to search for a suitable solution.

On a similar theme, Greenberg and Pavio (1997) mapped out how a situation that triggers a specific emotion relates to a specific need and adaptive action.

For example, the loss of a loved one causes sadness. Sadness communicates the need for comfort and an adaptive action may be to seek connection and comfort from a loved one. Anxiety may communicate the need for safety resulting in hypervigilance and preparation, while guilt may communicate the need to repair a relationship resulting in an apology or other restorative action. In this sense, it is useful to think of emotions as messages that carry information to the brain in order to guide our behaviour to meet our needs.

Categories of Emotion

Emotions have been categorised in a variety of different ways. Paul Ekman identified six basic emotions:

- Happiness
- Anger
- Sadness
- Surprise
- Disgust
- Fear

Based on cross-cultural research, Ekman argues that the facial expressions for these emotions are universal regardless of ethnicity, gender, race, or culture. He refers to these universal facial expressions as micro expressions. They are automatic behavioural responses to an emotion and can occur very quickly and briefly. Ekman later identified contempt as a seventh universal micro expression.

Emotions have also been categorised by their function, for example Bilikiewicz refers to "sthenic" emotions which increase readiness to act and "non sthenic" emotions with decrease our ability to act.

Plutchik (1980) divided emotions into basic and difficult emotions in the Wheel of Emotions. In this model the eight basic emotions (sadness, surprise, fear, trust, joy, anticipation, anger and disgust) cannot be divided any further and are positioned in "opposites" based on the physiological response associated with them (e.g. sadness opposite joy, anger opposite fear). Each basic emotion is associated with two difficult or tertiary emotions. The wheel also presents combination emotions in which two basic emotions such as joy and anticipation combine to create optimism.

Dr Gloria Willcox created a similar model, the feeling wheel, in 1982 which helps expand basic emotions into a vast range of more nuanced emotions. The Human System Emotion Wheel is a particularly useful tool when working with young people as it categorises emotions as comfortable and uncomfortable in the centre of the wheel and allows the young person to work their way through the layers to identify the emotion they are feeling.

While the Ekman and Plutchik models of basic emotions have been widely used, there is no universal definition of a "basic emotion". It is worth reiterating that emotions

are a subjective experience and a fluid process which makes it difficult to categorise them.

It can however, be helpful to think of emotions in terms of “primary” and “secondary”.

Primary emotions are the instinctive, natural responses to the world around us.

Secondary emotions occur as a result of the primary emotion. They are often learned or habitual and can have defensive, avoidant or protective functions.

Secondary emotions are motivated by pain reduction and can often mask the primary emotion. For example, if the primary emotion is fear it could lead to secondary emotions of anxiety, shame or hatred. Because secondary emotions such as guilt, shame, resentment, frustration, and remorse can build up over time and cause more pain and hurt, especially if the primary emotion is not addressed.

Recognising Emotions

Recognising emotions in ourselves and others is a vital skill in all walks of life. However, emotional intelligence has an added significance when working with young people, families or vulnerable adults in education, third sector, voluntary, or health and social care settings. It's useful to explore sensations in the body with a service user to help them understand what emotion they are feeling if they are unable to recognise and name it themselves. Knowing what to look out for allows the professional to ask the right questions to explore an emotion or respond appropriately when difficult emotions are presented.

Below is a summary of some of the physiological and behavioural cues associated with different emotions.

Anger is associated with increased activity in the chest, arms face and head. Signs of anger include, physical shaking, clenched fist, clenched jaw, red complexion, increased breathing, the appearance of swelling in the chest, raised voice, lifted posture and tense muscles.

Sadness is thought to increase sensation in the chest, throat and head but decreased activity in the limbs. Depression is associated with decreased bodily sensations and a sense of numbness. Behaviours include a stooped posture, sunken features, and limb muscles. Bodily functions such as metabolism, breathing and heart rate slowdown.

Anxiety activates the stomach, chest and head. It results in increased breathing, heart rate, temperature, sweating. Behaviours could include comfort habits such as biting nails or pulling at hair, shaking, rocking, and a shrinking posture.

Fear varies depending on a person's survival response. It could manifest in a similar way to anxiety or it could appear similar to anger if a “fight” response is triggered. A fight-or-flight response will increase heart rate and breathing, tense muscles, and a

lifted or threatening posture while a freeze response will result in shallow breathing and the slowing down of bodily functions.

Read our other article on tips for working with emotions.

References and Further Reading

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