

CASE STUDY: Basic emotions as natural kinds

Many psychologists would agree that there are discrete emotions such as joy, sadness, anger and fear, but there is no consensus on a definition of the term *emotion*. Furthermore, there is disagreement on the processes that activate emotions, and the role of emotions in daily activities and pursuits.

Izard (2007) argues that basic emotions such as interest, joy/happiness, sadness, anger, disgust and fear may be considered as “natural kinds”. That is, they are a category of phenomena that are given by nature, have similar observable properties and are alike in some significant way. These properties include the capacity to regulate and motivate cognition and action. According to Izard, a basic emotion has five components or characteristics that support its classification as a natural kind:

1. Basic emotions involve internal bodily activity, and expression of these emotions emerges early in ontogeny (for example, infants show more interest in a human face than in a mannequin).
2. Activation of a basic emotion depends on perception of an ecologically valid stimulus (like a mother’s face).
3. A basic emotion has a unique feeling component that can be conceptualised as a phase of the associated neurobiological process.
4. A basic emotion has unique regulatory properties that modulate cognition and action.
5. A basic emotion has non-cyclic motivational capacities.

There is substantial evidence that basic emotions have evolutionarily based neurobiological roots, and at least partially dedicated neural systems, for example in the brainstem and limbic structures. Even early in development, basic emotions can be functional and motivational in unique ways, for example in recruiting and organising motor response systems.

In sum, Izard argues that each basic emotion has distinct universal and unlearned regulatory and motivational characteristics. For example, the basic emotion of interest may serve to focus and sustain attention, and motivate exploration and learning. In contrast, the emotion of fear inhibits approach and motivates escape or protective behaviour. These characteristics can be considered as a cluster of properties that define basic emotions as natural kinds.

Reference

Izard, C.E. (2007). Basic emotions, natural kinds, emotion schemas, and a new paradigm. *Perspectives on Psychological Science*, 2(3): 260–80 [doi: 10.1111/j.1745-6916.2007.00044.x].