Emotion

A reaction, both psychological and physical, subjectively experienced as strong feelings, many of which prepare the body for immediate action.

In contrast to moods, which are generally longer-lasting, emotions are transitory, with relatively well-defined beginnings and endings. They also have valence, meaning that they are either positive or negative. Subjectively, emotions are experienced as passive phenomena.

Even though it is possible to exert a measure of control over one’s emotions, they are not initiated—they happen to people. Objectively, emotions involve internal physiological responses and expressive outward displays that are both learned and innate. Certain emotions themselves, considered to be primary emotions—joy, anger, sadness, fear, and love—are thought to be innate, while complex emotions—such as altruism, shame, guilt, and envy—seem to arise from social learning.

The first influential theory of emotion in modern times—the James-Lange theory—was formulated independently in the 1880s by both American psychologist and philosopher William James and Danish physiologist C.G. Lange (1834-1900). Both scientists arrived at the view that the physiological manifestations of emotion precede the subjective ones—rather than trembling because we are afraid, we are afraid because we tremble. Even though the brain responds to a threatening situation by activating peripheral responses, we do not consciously experience the emotion until these responses are activated. Thus, the central nervous system itself does not actually produce the emotion. Over the following decades, this theory drew widespread response and criticism.

An alternative model of emotional experience was formulated in 1927 by Walter Cannon (1871-1945), who proposed that emotions do originate in the central nervous system. Cannon argued that nerve impulses first pass through the thalamus, from which subjective responses are routed through the cerebral cortex, directly creating the experience of fear at the same time that physiological responses are passing through the hypothalamus. The Cannon-Bard theory, whose name reflects later modifications by Phillip Bard, thus delineated the psychological and physiological components of emotion as simultaneous and argued that the experience of emotion comes directly from the central nervous system. Some more recent theorists have once again moved closer to the James-Lange model. The 1962 Schachter-Singer theory restores James’s emphasis on the interpretation of physiological responses but adds another element—a cognitive evaluation of what caused the responses. This theory thus contradicts James’s assertion that emotion is communicated solely on the basis of physical feedback, asserting that this feedback by itself is not clear enough to specify a particular emotion. Rather, the brain chooses one of many possible interpretations and “labels” the feedback pattern, and it is this labeling that results in the experiencing of a particular emotion.

Areas of the brain that play an important role in the production of emotions include the reticular formation, the limbic system, and the cerebral cortex. The reticular formation, within the brain stem, receives and filters sensory information before passing it on to the limbic system...
and cortex. The limbic system includes the hypothalamus, which produces most of the peripheral responses to emotion through its control of the endocrine and autonomic nervous systems; the amygdala, which is associated with fear and aggressive behavior; the hippocampus; and parts of the thalamus. The frontal lobes of the cerebral cortex receive nerve impulses from the thalamus and play an active role in the experience and expression of emotions.

While the physiological changes associated with emotions are triggered by the brain, they are carried out by the endocrine and autonomic nervous systems. In response to fear or anger, for example, the brain signals the pituitary gland to release a hormone called ACTH, which in turn causes the adrenal glands to secrete cortisol, another hormone that triggers what is known as the fight-or-flight response, a combination of physical changes that prepare the body for action in dangerous situations. The heart beats faster, respiration is more rapid, the liver releases glucose into the bloodstream to supply added energy, fuels are mobilized from the body’s stored fat, and the body generally goes into a state of high arousal. The pupils dilate, perspiration increases while secretion of saliva and mucous decreases, hairs on the body become erect, causing “goose pimples,” and the digestive system slows down as blood is diverted to the brain and skeletal muscles. These changes are carried out with the aid of the sympathetic nervous system, one of two divisions of the autonomic nervous system. When the crisis is over, the parasympathetic nervous system, which conserves the body’s energy and resources, returns things to their normal state.

Ways of expressing emotion may be either innate or culturally acquired. Certain facial expressions, such as smiling, have been found to be universal, even among blind persons, who have no means of imitating them. Other expressions vary across cultures. For example, the Chinese stick out their tongues to register surprise, in contrast to Americans and other Westerners, who raise their eyebrows and widen their eyes. In addition to the ways of communicating various emotions, people within a culture also learn certain unwritten codes governing emotional expression itself—what emotions can be openly expressed and under what circumstances. Cultural forces also influence how people describe and categorize what they are feeling. An emotion that is commonly recognized in one society may be subsumed under another emotion in a different one. Some cultures, for example, do not distinguish between anger and sadness. Tahitians, who have no word for either sadness or guilt, have 46 words for various types of anger.

In daily life, emotional arousal may have beneficial or disruptive effects, depending on the situation and the intensity of the emotion. Moderate levels of arousal increase efficiency levels by making people more alert. However, intense emotions—either positive or negative—interfere with performance because central nervous system responses are channeled in too many directions at once. The effects of arousal on performance also depend on the difficulty of the task at hand; emotions interfere less with simple tasks than with more complicated ones.

Further Reading

### Empathy

The capacity to vicariously experience and understand the thoughts and feelings of another person by putting oneself in that person’s place.

While most forms of psychotherapy require some degree of empathy on the part of the counselor or therapist, the client-centered therapy pioneered by Carl Rogers places particular emphasis on this quality as part of the therapeutic experience. Instead of looking at the client from outside (external frame of reference), the client-centered therapist attempts to see things as they actually look to the client (internal frame of reference). Throughout each therapy session, the therapist demonstrates what Rogers termed “accurate empathetic understanding,” showing sensitivity to the client’s feelings through active listening that shows careful and perceptive attention to what the client is saying. The therapist employs standard behaviors common to all good listeners, making frequent eye contact with the client, nodding in agreement or understanding, and generally showing that he or she is listening attentively.

One unique way client-centered therapists demonstrate empathy with the client is through a special method called reflection, which consists of paraphrasing and/or summarizing what a client has just said. This technique lets therapists check the accuracy of their perceptions while showing clients that they are paying careful attention to and are interested in what is being said. Hearing their own thoughts and feelings repeated by another person can also help clients achieve new levels of insight and self-awareness. Clients generally respond to reflection by elaborating further on the thoughts they have just expressed. Empathy constitutes a major portion of the therapeutic work in client-centered therapy. By helping clients feel better about themselves, it gives