

Cannon–bard theory of emotion

[Science](#)



As you are hiking through the woods, a bear walks out onto the path. In an instant you begin to tense up and sweat. In the same instant you are filled with fear. These two events of physiological responses and emotional experience happen at the same time, not one after the other. That is why the Cannon-Bard theory of emotion is a better indicator of how our bodies and minds respond to stimuli.

Cannon and Bard highlighted the role of the brain in generating physiological responses and feelings; a role that is important in their explanation of emotion experience and production. The main assertions of the Cannon-Bard theory are that emotional expression results from the function of hypothalamic structures, and emotional feeling results from stimulations of the dorsal thalamus. The physiological changes and subjective feeling of an emotion in response to a stimulus are separate and independent; arousal does not have to occur before the emotion (Adcock, 1976).

Cannon-Bard theory states that we feel emotions and experience physiological reactions such as sweating, trembling and muscle tension simultaneously. More specifically, it is suggested that emotions result when the thalamus sends a message to the brain in response to a stimulus, resulting in a physiological reaction (Hayes, 2003). For example: I see a snake --> I am afraid --> I begin to tremble. According to the Cannon-Bard theory of emotion, we react to a stimulus and experience the associated emotion at the same time (Carlson, 2013).

The key component of the Cannon-Bard theory of emotion is that when the thalamic discharge occurs, the bodily changes occur almost simultaneously with the emotional experience. The bodily changes and emotional

<https://assignbuster.com/cannonbard-theory-of-emotion/>

experience occur separately and independently of one another; physiological arousal does not have to precede emotional expression or experience. The theory asserts that the thalamic region is the brain area responsible for emotional responses to experienced stimuli (Adcock, 1976). Walter Cannon criticized the James-Lange theory for several reasons.

He argued that emotion occurs even if the bodily changes which transmit feedback to the brain are eliminated (Hayes, 2003). He severed neural connections to the cortex of cats (creating “decorticate cats”). The decorticate cats, when provoked, exhibited the emotional behavior normally associated with rage and aggression, as demonstrated by erect hair, growling, and the baring of teeth (Hayes, 2003).

Cannon called the behavior sham rage because according to the James-Lange theory emotional behavior could not occur without connections to the brain. In addition, Cannon argued that visceral responses occur too slowly to be recognized by the brain before emotional responses to a stimuli occur (Adcock, 1976).

Works Cited

- Adcock, C. (1976). *Psychology and Theory*. Hong Kong: Victoria University Press.
- Neil R. Carlson, H. M. (2013). *Psychology: The Science of Experience*. USA: Pearson Learning Solutions.
- Nick Hayes, P. S. (2003). *Students Dictionary of Psychology*. New York: Oxford University Press Inc.