

Constructionist View of the Brain



The *classical theory* of how the brain works and controls emotions taught us that certain regions of the brain perform specific functions and are responsible for our emotions (such as the amygdala and prefrontal cortex). In recent years, this classical view of how the brain works to describe emotions has been challenged by scientists and researchers. Today, new research shows us that the brain does not compartmentalize itself into these discrete areas. Instead, the brain uses information from the body, past experiences, and current situations to construct our view of the world and informs our emotions. This is the *constructionist view* of the brain.

In Lisa Feldman Barrettt's ground-breaking book, <u>How Emotions are Made</u>, she explains that emotions do not have a specific location in the brain from which they are Emozi® is a registered trademark of A.Mackey, M.Ed. ©2025 Anna-Lisa Mackey, M.Ed.. All rights reserved.

generated. Instead, fMRI machines show that these connections take place across the brain. It is more efficient for the brain to use, "many sets of neurons to produce the same outcome" and that "any single neuron can contribute to more than one outcome" (p. 38). This kind of brain is more robust, using its power efficiently and flexibly.

From the moment the brain perceives sensations from the body, it begins to attempt to categorize this information. These categories are called *concepts*. The entire purpose of the brain is to help maintain the body (body budget) and keep it in balance not too cold, not too hot, not too hungry, not too thirsty, etc. The information that the brain receives from the body is called *interoception*, which is information from the senses that the brain interprets into concepts.

Language is an important part of concept formation, which represents past experiences. As more concepts are formed, the brain begins to predict based on the interoceptive information and the context or situation in which you find yourself. These concepts are how the brain makes meaning of all the sensations and input it receives. Sometimes, the prediction of meaning is an emotion like happy, sad, or mad.

Contrary to popularly-held belief, emotions do not have markers or specific, recognizable, universal facial features. Take the experience of happy, for instance. Sometimes we smile, sometimes we cry, sometimes we show nothing on our face to indicate to others how we feel. When we say we are happy, we are not experiencing ALL the kinds of happiness that can be experienced. We are experiencing one example of happiness, or an instance of the emotion happy. To say that happy is experienced in only one way is incorrect because we have felt happy in many different situations. The brain is predicting the sort of happy concept that it thinks is appropriate in this moment. And, it does it so rapidly, that we do not perceive this guessing game at work.

We can influence this predictive process somewhat. Dr. Barrett explains, "Each time you perform a physical act for your body budget, you're doing something mental with concepts. Every mental activity has a physical effect as well. You can put this connection to work for you" (p. 175).

Here are some ways to influence emotional experiences for yourself and your students:

- 1. Improve your understanding of instances of emotion and develop a richer emotional vocabulary. Learn new, more precise words for emotions because language is the foundation of concepts. The more concepts you have, the more flexible and creative your brain can be with its predictions and accuracy. Emotional granularity is key to creating more distinct concepts. For example, Barrett says, "Don't be satisfied with "happy": seek out and use more specific words like "ecstatic," "blissful," and "inspired" (p. 181). Reflect on why you might have experienced an instance of emotion. What context concept might it be related to? Can you re-frame the experience?
- Keep your body in good shape by getting enough rest, exercise, and proper nutrition. Remember, the brain is using its interoceptive network to predict emotion all the time. If the information that it gets from the body is unhealthy, this impacts its predictive concepts of emotion.
- 3. Focus on the positives. Find something to be grateful about every day. And if possible, write about them. Not only will this help reinforce positive concepts but will also help you to predict future positive instances.
- 4. Just as you want to focus on the positive, avoid rumination. Focusing on the negative creates more and more opportunities for your brain to recreate that unpleasant instance of emotion, instead of a positive one.
- Don't assume children are too young to have conversations about emotions.
 Have open and honest conversations and don't limit these conversations to stereotypes about emotions.
- 6. Change your location. Your environment plays a role in what your brain perceives, and changing your location changes the information your brain experiences. By simply changing your location and/or situations, this change in context can help you to change your feelings.

Research and science constantly changes and adds new information to our knowledge base, and we must adapt this new information into our understanding of emotions.