

Module: Psychological Foundations of Mental Health

Week 3

Introduction to emotion and emotional processing

Topic 1

Nature of emotion – Part 2 of 3

Dr Tom Barry

Department of Psychology, King's College London

Dr Jennifer Lau

Department of Psychology, King's College London

Lecture transcript

Slide 3

Now that we have some idea of what emotions are, we might ask what function, if any, do emotions serve? Can they be helpful, or are they merely a hindrance in our lives? Not everyone thinks that emotions can serve any beneficial function.

These researchers, such as B.F Skinner, think that emotions are useless and bad for our peace of mind and blood pressure. I'm sure we've each experienced times where we feel that emotions might not be very functional or good for us, particularly when thinking about negative emotions like sadness. However, most scientists agree emotions have beneficial consequences. In particular, we can view emotions, both positive and negative, as solutions to physical or social problems or opportunities that we encounter in our lives that can benefit our survival.

Slide 4

There are several functions that emotions have been hypothesised to serve, as this diagram illustrates. For example, they can help our bodies to prepare for action by generating autonomic and endocrine responses. The feeling of relief, for example, is associated with a decrease in heart rate, and the feeling of apprehension is associated with secretion of the stress hormone cortisol. Emotions can serve various other functions, too. In the following slides, we will focus on some of these functions.

Slide 5

As you saw in the diagram, emotions can aid in motivating us to approach or avoid things in our environment. Whether or not the behaviour of approach or avoidance is selected depends on the type of emotion that a stimulus elicits. We can test this experimentally with Pavlovian conditioning.

For example, we might pair one stimulus, a right triangle, with an electric shock. And another stimulus, a green square, may be paired with an increase in a financial reward given to participants. We then give participants a joystick which controls a small mannequin on the computer screen and ask participants to approach the stimuli by pushing the joystick.

In studies which use this kind of paradigm, the degree of fear that a participant shows in the presence of the red triangle is likely to correlate with the extent to which participants push the mannequin

towards the triangle with more fear corresponding with greater distance between the triangle and the mannequin. Fearful participants might also move towards the stimulus more slowly. Similarly, the degree of pleasure that a person feels from being rewarded more money is likely to correlate with their approach of the green square and the speed with which they approach it. Interestingly, Carver and Harmon-Jones suggested, in their 2009 paper, that, if participants in such an experiment are forced to approach a stimulus that they have been conditioned to fear-- such as our triangle-- this may elicit anger.

Slide 6

Emotions don't just motivate and influence our own behaviour but also that of others. For example, by producing facial expressions, we can help others in two ways. Emotional expressions communicate to others the reinforcing value of stimuli they haven't experienced themselves yet. For example, I might express disgust after eating a food that you may never have tasted before-- signalling to you that you should perhaps avoid it.

These expressions can also help others prepare for approaching stimuli that they may not yet be aware of. For example, I might enter a room before you and express terror. How can you prepare your body? By activating the autonomic and endocrine response systems to be able to act quickly and respond to whatever is in the room.

They can also help us form social bonds with others. For example, the infants of parents who express more positive emotions are more likely to be securely attached. In turn, these securely-attached infants are more likely to be comforted by contact with their parents, such as in the strange situation procedure. The emotional expressions of infants also help parents consolidate their bonds with their infant, too.

Slide 7

As you'll see in future topics, emotions can also influence the utilisation and efficiency of cognitive processes. For example, emotions can influence the way that things are stored in memory. More specifically, they can help us select the most relevant pieces of information from an event for further storage so that we only have to remember the bits of information from an event that are most important.

The emotions that we feel during an event can also be stored alongside our memory for the details of an event. This means that, when we are in a particular mood or we experience an emotion at a later date, this can improve the ease with which information related to this current mood-- perhaps from previous related experiences-- can be retrieved from our memories. By improving access to certain memories, we are better able to select appropriate behavioural responses to current events on the basis of how we responded the last time we felt this emotion and what the effects of that response were.

Slide 8

Another important consideration that we will come back to is-- although our emotions can serve some vital functions in helping us survive physically and socially-- for some people, there are situations in which the intensity with which they feel particular emotions may not be beneficial for survival and may even be detrimental. Also, if we are exposed to inappropriate emotions expressed by others, this might also be detrimental. For example, Radke-Yarrow and colleagues showed, in 1985, that exposure to inappropriate-- and in particular, excessively negative emotions-- when we're young can also have detrimental effects on how we form social bonds with those.