

Describe and evaluate any two theories of emotion

James and Lange independently suggested that certain events cause physiological changes in the body and that emotions are caused by those physical changes. To use James' example, if we meet a bear, this causes a bodily response of arousal and a behavioural response such as running away. The emotion of fear is simply your awareness of these changes. The James–Lange theory therefore goes against what might seem the common sense notion that crying is caused by sadness or trembling by fear, suggesting instead that we label our subjective state by inferring how we feel based on perception of our own bodily changes. We feel sad because we cry and feel afraid because we tremble.

Some everyday experiences may support this idea – if an individual has to react quickly, for example, when tripping down the stairs, a reaction may be to grab the banister as heart rate suddenly increases; only afterwards is the emotion of fear experienced.

According to Cannon (1929), there are four major faults with the James–Lange theory. Firstly, it assumes that for each subjectively distinct emotion there is a corresponding set of physiological changes enabling us to label the emotion we are experiencing. Although extreme emotions such as anger and fear can be distinguished on the basis of physiological changes, usually such differences between emotions are subtle if they exist at all. Secondly, physiological arousal cannot be sufficient to produce emotion otherwise physical exercise or taking stimulant drugs would produce emotional feelings. Running up the stairs is not usually an emotional experience, but research findings on drugs is less clear cut. Thirdly, physiological arousal may not even be necessary to experience emotions – for example, sadness probably occurs in the absence of arousal. Finally the speed with which we often experience emotions seems to exceed the speed of response of the viscera, so how physiological changes can be the source of sudden emotion is unclear.

According to Schachter's (1964) cognitive labelling theory of emotion, physiological changes precede the experience of emotion. We have to decide which particular emotion we're feeling and the label we attach to our arousal depends on what we attribute that arousal to. He argued that other theories of emotion, such as the James-Lange theory, had largely ignored the important role of cognitive factors. So physiological arousal is necessary for the experience of emotion, but the nature of arousal is immaterial, what's crucial is how we interpret that arousal – our cognitive appraisal when a stimulus is perceived and evaluated.

One prediction from the cognitive labelling theory is that if a state of unexplained bodily arousal is induced in participants, they will look around and try to explain it in terms of their environment. If this cognitive appraisal involves an emotional element, then they will label their state of arousal as an emotional experience. Schachter & Singer (1962) devised an experiment to test cognitive labelling theory by inducing a completely unexpected and unexplained state of arousal and then manipulating the environment to try and produce different emotional states. Adrenaline was used to produce physiological arousal, but participants thought they were receiving a vitamin supplement. A control group received a non-active placebo. The experimental groups were either told to expect the real physiological consequences or were left ignorant. The experimental condition was manipulated in two ways. In the euphoria condition, a confederate acted in a happy manner, and in the anger condition, a confederate became progressively more angry as he and the participant filled in a highly personal questionnaire. Participants' emotions were assessed by self-report scales and observers' ratings of the degree to which they joined in with the confederate's behaviour.

The group told to expect the real physiological consequences following the injection were much less likely to join in with the stooge or report feeling happy or angry. This is because they already had a completely appropriate explanation of their state and did not need the explanation offered by the confederate's behaviour. The control group were also less likely to report a change in emotion because they had no arousal state to explain or label. The participants left ignorant were found to be more likely to report a change in emotion – they experienced an unexplained state of arousal and to interpret it used cognitive appraisal of the environment including the behaviour of the confederate.

Although these findings have been confirmed by Schachter & Wheeler (1962) and Dutton & Aron (1974), a number of criticisms have been highlighted. There was no assessment of participants' emotional state before the study, which may have interacted with the experimental manipulations. In addition, unexplained bodily arousal is an unusual state in real life, and so is drug-induced arousal. The study is far removed from natural emotions and this reduces its validity. Schachter (1964) admitted that we usually are aware of a precipitating situation prior to the onset of arousal, which takes one or two seconds to reach consciousness. Therefore it is usually obvious to the person what aspects of the situation have provoked the emotion, but even here the meaning of some emotion-inducing circumstances requires some cognitive analysis before the emotion can be labelled.

Using the original Schachter and Singer paradigm, several studies, such as Marshall & Zimbardo (1979) and Maslach (1979), have concluded that when we look for an explanation for a state of arousal we don't merely use others' behaviour as a guide to what we are feeling. We call on many other sources of information as well, particularly our own past experiences. While other people's behaviour may suggest how we should behave in that situation, it does not tell us how we are feeling (Weiner, 1992).

These later studies also found that people who do not have a ready-made explanation for their adrenaline-produced arousal are more likely to attach a negative emotional label to it, such as anxiety. This suggests that emotional malleability is not as great as Schachter maintains: unexplained arousal has a negative, unpleasant quality about it.

It is possible to draw some general conclusions from the two theories. Bodily, physiological arousal is important in intensifying emotional experiences, such as fear and anger, but may not be necessary for all emotional experience. Cognitive processes such as perception and appraisal are likely to be necessary for emotion. The huge range of human emotions means that simple models of the links between emotion, arousal and cognition are unrealistic.