

What does your face say?

Research by scientists from the Institute of Neuroscience and Psychology at the University of Glasgow has challenged the traditional view of how the face expresses emotions. Until now, it



was widely believed that six basic emotions (happiness, sadness, fear, anger, surprise and disgust) were expressed and recognised across different cultures. However, the University of Glasgow's work now suggests that the human face only has four basic expressions of emotion. This is because some pairs of emotions are impossible to distinguish, especially when they are first registering on the face. Fear and surprise, for example, both share wide open eyes. The facial expressions for anger and disgust also look the same.

So, if our faces are only able to express four basic emotions, how do we communicate a much more complex variety of feelings? The study found that the way expressions are interpreted is different in different cultures. Lead researcher Dr Rachael Jack was studying this phenomenon because 'facial expressions were considered to be universal', she explains. However, while looking at how people from the East and West look at different parts of the face during facial expression recognition, they found that although there are some common features across cultures, the six basic facial expressions of emotion are not recognised universally.

'We said we don't know what a disgust face looks like in China, so the best way to go about that is to make all combinations of facial movements and show to Chinese observers and ask them to choose the ones they think are disgust faces.' With the software they developed, they discovered that in the early stages of signalling emotion, fear and surprise, and anger and disgust, were often confused. Jack explains that these facial expressions have developed both from biology and social evolution.

'This work leads to understanding which emotions we share, appreciating our differences and highlighting our multicultural global experiences.' This research could inform new ways of social communication that facilitate cross-cultural interactions. 'You can have a Skype system where you might be interacting with someone in Japan,' Jack explains. 'The system would interpret your facial expressions based on knowledge of Western facial expressions, then interpret that for the Japanese observer. You can imagine they would have an avatar of the person's face, and the facial expression would be translated into the Japanese facial expression on the avatar.'

Read the text and mark the statements T (true) or F (false):

1. The scientists from the University of Glasgow believe there are six basic emotions that we can recognise from facial expressions. _____
2. The emotions that are expressed on your face can be understood in different ways. _____
3. People from different places may have a different concept of what a disgust face looks like. _____
4. The scientists in Glasgow discovered that all cultures could recognise the difference between fear and surprise. _____

5. Researchers asked Chinese volunteers to pull disgusted expressions and took photographs. _____
6. Our facial expressions have developed as a result of biological factors and our social context. _____
7. This work helps us to appreciate similarities and differences between different cultures and the way that they express emotions. _____
8. This research could be used to help people understand each other better when using new technologies. _____

Fill in the gaps with a correct form of the word in a bracket to complete the summary:

The various _____ (EXPRESS) which we make on our faces communicate different emotions. However, it seems that there are different _____ (INTERPRET) of what emotion is being expressed in different parts of the world. A team of scientists from Glasgow University has done research into understanding how facial expressions are interpreted across cultures. When an observer makes a _____ (DECIDE) about what emotion a face is expressing, it seems that people from the East and the West actually look at different parts of the face. This could even lead to an unfortunate _____ (UNDERSTAND) when two people from different cultures are communicating. The research from the Glasgow University team may have an important _____ (APPLY) in the world of social media when people from different cultures are communicating. One future _____ (POSSIBLE) is that people talking on Skype may have an on-screen avatar which could translate the speaker's facial expression so that the other person can understand how they feel. This would certainly avoid a lot of _____ (CONFUSE) and help people from different cultures to understand each other.