

Psychological researchers generally recognize that facial expressions reflect emotional states. In fact, various emotional states give rise to certain patterns of electrical activity in the facial muscles and in the brain. The facial-feedback hypothesis argues, however, that the causal relationship between emotions and facial expressions can also work in the opposite direction. According to this hypothesis, signals from the facial muscles ("feedback") are sent back to emotion centers of the brain, and so a person's facial expression can influence that person's emotional state. Consider Darwin's words: "The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as possible, of all outward signs softens our emotions." Can smiling give rise to feelings of goodwill, for example, and frowning to anger?

7. According to the passage, what did Darwin believe would happen to human emotions that were not expressed?
- They would become less intense.
  - They would last longer than usual.
  - They would cause problems later.
  - They would become more negative.

Psychological research has given rise to some interesting findings concerning the **facial-feedback hypothesis**. Causing participants in experiments to smile, for example, leads them to report more positive feelings and to **rate** cartoons (humorous drawings of people or situations) as being more humorous. When they are caused to frown, they rate cartoons as being more aggressive.

8. According to the passage, research involving which of the following supported the "**facial-feedback hypothesis**"?
- The reactions of people in experiments to cartoons
  - The tendency of people in experiments to cooperate
  - The release of neurotransmitters by people during experiments
  - The long-term effects of repressing emotions
9. The word "**rate**" in the passage is closest in meaning to
- judge
  - reject
  - draw
  - want