Decoding Emotions by Analyzing Speech, Body, and Face

Emotions
Exercise
10-40 min.
~~Group~~
No

This activity has been modified by Student Wellbeing to be used individually and not in a group setting.

The ability to accurately perceive and understand the emotions of the people around us is a core component of emotional intelligence (Davies, Stankov & Roberts, 1998). Accurately "reading" other people's emotions plays a key role in social interaction (Kilts, Egan, Gideon, Ely, & Hoffman, 2003) as it facilitates appropriate responding and bonding (Isaacowitz et al., 2007). There are three different ways to "read" other people's emotions.

First, one can try to decipher facial expressions. Past research has provided strong evidence for the universal facial expressions of seven emotions – anger, contempt, disgust, fear, joy, sadness, and surprise. For instance, a study by Friesen (1972) found that the same facial expressions of emotions were produced spontaneously by members of very different cultures in reaction to emotion-eliciting films.

Second, one can attempt to "read" body language. There is evidence to suggest that numerous emotions, including pride, shame, anger, fear, and disgust (e.g., de Gelder & van den Stock, 2011; Keltner, 1995; Tracy, Robins, & Schriber, 2009) can be accurately deciphered from nonverbal bodily displays (see Witkower & Tracy, 2018 for a review).

Third, it is possible to decode emotions by observing speech. People use hundreds, if not thousands, of semantic terms to express a wide variety of emotional states (Russell, 1991; Sabini & Silver, 2005). Aside from the verbal information in speech, emotions are also expressed by the non-verbal qualities of speech, such as pitch, loudness and rate of speech (for reviews see Scherer 1977, 1981). In this tool, participants practice reading other people's emotions by exploring each of these three ways of decoding emotions.

Author

This tool was created by Hugo Alberts (PhD).

Goal

The goal of this tool is to increase people's ability to accurately perceive and understand the emotions of others.

Suggested Readings

Davies, M., Stankov, L., & Roberts, R. D. (1998). Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology*, *75*, 989-1015.

De Gelder, B., van den Stock, J., Meeren, H. K. M., Sinke, C. B. A., Kret, M. E., & Tamietto, M. (2010). Standing up for the body. Recent progress in uncovering the networks involved in the perception of bodies and bodily expressions. *Neuroscience and Biobehavioral Reviews*, *34*, 513–527.

Friesen, W. V. (1972). Cultural differences in facial expression in a social situation: An experimental test of the concept of display rules. *Unpublished doctoral dissertation.* University of California San Francisco.

Isaacowitz, D. M., Löckenhoff, C. E., Lane, R. D., Wright, R., Sechrest, L., Riedel, R., & Costa, P. T. (2007). Age differences in recognition of emotion in lexical stimuli and facial expressions. *Psychology and Aging*, *22*, 147-159.

Keltner, D., & Buswell, B. N. (1997). Embarrassment: Its distinct form and appeasement functions. *Psychological Bulletin*, *122*, 250–270.

Kilts, C. D., Egan, G., Gideon, D. A., Ely, T. D., & Hoffman, J. M. (2003). Dissociable neural pathways are involved in the recognition of emotion in static and dynamic facial expressions. *Neuroimage*, *18*, 156-168.

Russell, J. A. (1991). Culture and the categorization of emotions. *Psychological Bulletin*, *110*, 426-450.

Sabini, J., & Silver, M. (2005). Why emotion names and experiences don't neatly pair. *Psychological Inquiry*, *16*, 1-10.

Scherer, K. R. (1981). Speech and emotional actions. In J. K. Darby, Jr. (Ed.), *Speech evaluation in psychiatry* (pp. 189-220). New York: Grune & Stratton.

Scherer, K. R., & Oshinsky, J. S. (1977). Cue utilization in emotion attribution from auditory stimuli. *Motivation and Emotion*, *1*, 331-346.

Tracy, J. L., Robins, R. W., & Schriber, R. A. (2009). Development of a FACS-verified set of basic and self-conscious emotion expressions. *Emotion*, *9*, 554–559.

Witkower, Z., & Tracy, J. L. (2018). Bodily Communication of Emotion: Evidence for Extrafacial Behavioral Expressions and Available Coding Systems. *Emotion Review.*

Tool description

The experience of an emotion is reflected by changes in speech, body, and face. For example, a person who experiences joy may speak loudly, make a lot of gestures, and use positive words like “beautiful” and “exciting”. In this exercise, you are going to practice “reading” other people’s emotions through decoding the face (analyzing facial expressions), decoding the body (analyzing how they are moving) and decoding speech (analyzing how they are talking).

Practice this exercise while watching a character in a movie, or reflecting upon an incident that occurred in class, work or social life. To begin with you may focus on one area at a time, but become used to looking at all three areas (facial, bodily and verbal), as these characteristics of emotional expression operate together rather than in isolation. For instance, focusing only on words to decode the emotion of another person is unlikely to be accurate, given nonverbal cues modify, augment, illustrate, accentuate, and contradict the words they accompany. The integration of facial and bodily expressions is required to capture the full essence of an emotion.

Also, take into account that even though there are commonalities in emotional expression within people, each person is individual and unique and there are differences between people in expression of emotion. You are learning to make an educated guess based on commonalities and increasing your awareness.

After decoding evaluate your responses. The following questions may serve as a guide:

- How was it to do this exercise?
- Which aspects were challenging?
- What did you learn?
- What is your take-home message?

Emotions list	
Anger	fury, outrage, wrath, irritability, hostility, resentment and violence.
Sadness	grief, sorrow, gloom, melancholy, despair, loneliness, and depression.
Fear	anxiety, apprehension, nervousness, dread, fright, and panic.
Joy	enjoyment, happiness, relief, bliss, delight, pride, thrill, and ecstasy.
Interest	acceptance, friendliness, trust, kindness, affection, love, and devotion.
Surprise	shock, astonishment, amazement, astound, and wonder.
Disgust	contempt, disdain, scorn, aversion, distaste, and revulsion.
Shame	guilt, embarrassment, chagrin, remorse, regret, and contrition.

Decoding the Face

The face is a dynamic canvas on which people display their emotional states, and from which they decode the emotional states of others. For instance, a person who is surprised may raise their eyebrows, open their eyes wide, and drop their jaw. When a single emotion emerges and the individual does not attempt to modify or conceal it, facial expressions typically last between 0.5 to 4 seconds and involve the entire face. The ability to correctly perceive and understand other people's emotions through facial expressions is associated with better personal and social effectiveness, and as such is a key aspect of optimal human functioning.

Carefully observe expressions. For example, you may notice that the speaker's eyes are wide open in surprise, drooped down in sadness, lips are tensed, or cheeks are flushed red. Write down every facial sign of the emotion that you notice, and then make an informed guess as to what emotion the person is feeling.

Decoding the Face	
Eyes	
Eyelids	
Eyebrows	
Nostrils	
Mouth	
Lips	
Other	
The speaker's emotion is:	

Decoding the Body

There is evidence to suggest that numerous emotions, including pride, shame, anger, fear, and disgust can be accurately deciphered from nonverbal bodily displays. Pride, for instance, is typically signalled by an expanded chest, upward head tilt, and arms akimbo—either spread out from the body with hands on hips or raised above the head with hands in fists. Bodily expressions of emotions are universal, generalizing across race and disparate cultures, being reliably recognized by young children, and being spontaneously displayed by the blind.

Carefully observe the bodily expressions. For example, you may notice that the person has a slumped posture, downward gaze, and closed chest. Notice how the speaker is using their hands to gesture while speaking. What is their posture like? Write down every bodily sign of the emotion that you notice, and then make an informed guess as to what emotion the person is feeling.

Decoding the Body	
Head	
Shoulders	
Chest	
Arms	
Hands	
Legs	
Other	
The speaker's emotion is:	

Decoding Speech

People use hundreds, if not thousands, of terms to express emotional states. In some cases, the words that are used point directly to the emotion one is experiencing. For instance, the experience of fear may be expressed by saying "I am afraid". In other cases, figurative expressions are used, so that rather than literally naming the emotional state one is in, one relies on metaphors or analogies to express his or her subjective experience. In the English language, there are hundreds of linguistic expressions commonly used to talk about emotions. For example, "trembling like a leaf", "feeling trapped" and "hitting rock bottom". Obviously, in order to accurately decode emotion from language, one must know the meaning of the words or expressions used to communicate an emotion. Obviously, deciphering emotions in a non-native language is harder than doing so in one's own language. In addition to the verbal information in speech, emotions are also expressed by the non-verbal qualities of speech, such as pitch, volume, and rate of speech.

Carefully observe the person speech, including both *what* is being said (e.g., you may notice that the speaker is using signalling words and terms like "I felt trapped" or "I was on a high") and *how* it is being said (i.e., is the speaker talking quickly, loudly or softly, and with a high or low pitch?). Write down every speech sign of the emotion that you notice, and then make an informed guess as to what emotion the person is feeling.

Decoding Speech	
Words	
Pitch	
Volume	
Rate of speech	
Other	
The speaker's emotion is:	