

106. Hatfield, E. and Rapson, R. L. (2009). Emotional contagion. In Harry Reis & Susan Sprecher (Eds.) *Encyclopedia of human relationships*. (pp.492-493.) New York: SAGE.

Emotional Contagion

In recent years, scholars from a variety of disciplines—anthropology, neuroscience, biology, social psychology, sociology, life-span psychology, and history—have proposed that the process of primitive emotional contagion is of critical importance in understanding cognition, emotion, and behavior. Primitive emotional contagion appears to be a basic building block of human interaction—assisting in “mind-reading,” allowing people to understand and to share the feelings of others, as well as coordinate and synchronize their activities with them.

Most social psychologists agree that emotional “packages” are comprised of many components—including conscious awareness; facial, vocal, and postural expression; neurophysiological and autonomic nervous system activity; and instrumental behaviors. Different portions of the brain process the various aspects of emotion. Yet—because the brain integrates the emotional information it receives—each of the emotional components acts on and is acted upon by the others.

In the 1990s, Hatfield and her colleagues defined primitive *emotional contagion* as:

The tendency to automatically mimic and synchronize facial expressions, vocalizations, postures, and movements with

those of another person's and, consequently, to converge emotionally.

The *Emotional Contagion Scale (ES)* is designed to assess people's susceptibility to catching joy and happiness, love, fear and anxiety, anger, and sadness and depression, as well as emotions in general. The *ECS* has been translated into a variety of languages—including Finnish, German, Greek, Telugu (the state language of India), Japanese, Portuguese, and Swedish.

Personality theorists, who have administered this scale in a variety of cultures, have discovered that there are cultural, personality, gender, and situational differences in people's susceptibility to emotional contagion. People are most likely to catch others' emotions in two kinds of relationships—those involving love or power. We are particularly susceptible to contagion in the company of those we like and love and those who possess power over us.

According to scholars, contagion may occur in a number of ways. At first, scholars took it for granted that conscious reasoning, analysis, and imagination accounted for the ubiquitous phenomenon. Recently, however, social psychologists have concluded that primitive emotional contagion is a far more subtle, automatic, and ubiquitous process than once thought.

Mechanisms of Emotional Contagion

There is considerable evidence that that the process of emotional contagion occurs in three stages: Mimicry -> Feedback -> Contagion.

Mimicry: People appear to automatically mimic/synchronize their facial expressions, vocal productions, postures, and movements with those around them. (Daters, for example, might catch themselves mimicking their blind-date's silly giggle or angry, sarcastic demeanor.) People are capable of doing this with startling rapidity, automatically mimicking/synchronizing a number of emotional characteristics in a single instant.

Feedback: People tend to feel pale reflections of emotions consistent with the facial, vocal, and postural expressions they adopt. The link between facial, vocal, and postural expression appears to be quite specific. When people mimic expressions of fear, anger, sadness, or disgust, they tend to feel a pale reflection not just of any unpleasant emotion but with those *specific* expressions (e.g., those who mimic a sad expression feel sadness, not anger or shame.) (College students assigned to share a room with a deeply troubled roommate, start feeling increasingly anxious and depressed themselves over the course of the semester.)

Contagion: As a consequence, people tend, from moment-to-moment, to “catch” others' emotions.

Recently, discoveries in neuroscience have provided some insight into *why* people so readily “catch” the emotions of others and why it is so easy for people to empathize with other's cognitions, emotions, and behaviors. Some examples:

Neuroscientists contend that certain neurons (canonical neurons) provide a direct link between perception and action. Other types of neurons (mirror

neurons), fire when a certain type of action is performed *and* when primates observe another animal performing the same kind of action. Scientists propose that such brain structures account for emotional contagion and empathy in primates, including humans.

Other neuroscientists have argued that imagining, observing, or in any way preparing to perform an action excites the same motor programs used to execute that same action. There is, in fact, a great deal of recent research demonstrating that, in humans, several brain regions (specifically the *premotor* and *parietal cortices*) are activated both during action generation and during the observation of others' actions. These scientists argue that this mirror system allows people to plan their own actions and to understand the actions of others.

In the 1950s, primatologists conducted a great deal of research indicating that animals do seem to catch others' emotions. They found, for example, that monkeys often transmit their fears to their peers. The faces, voices, and postures of frightened monkeys serve as warnings; they signal potential trouble. Monkeys catch the fear of others and thus—in kind of a “monkey see, monkey do” fashion—are primed to make appropriate avoidance responses. Ethologists argue that the imitation of emotional expression constitutes a phylogenetically ancient and basic form of intraspecies communication. Such contagion also appears in many vertebrate species, including mice.

In conclusion: scholars from a variety of disciplines provide compelling evidence that people do in fact catch one another's emotions. They appear to catch the emotions in all societies and in a wide variety of individual and group settings.

Implications of Existing Research

In the Emotional Contagion paradigm, scholars confront a paradox. People seem to be capable of mimicking others' facial, vocal, and postural expressions with stunning rapidity. As a consequence, they are able to feel themselves into those other emotional lives to a surprising extent. And yet, puzzlingly, most people seem oblivious to the importance of mimicry/synchrony in social encounters. They seem unaware of how swiftly and how completely they are able to track the expressive behaviors and emotions of others.

What are some implications of the preceding research as to the nature of contagion? The research on emotional contagion underscores the fact that men and women use multiple means to gain information about others' emotional states. Conscious analytic skills can certainly help people figure out what makes people "tick". But if people pay careful attention to the emotions they experience in the company of others, they may well gain an extra edge into "feeling themselves" into the emotional states of others. Both of these means provide valuable information. In fact, there is evidence that both what people *think* and what they *feel* may provide valuable, but different, information about others. In one study, for example, social

psychologists found that people's conscious assessments of what others "must be" feeling were heavily influenced by what the others *said*. People's own emotions, however, were more influenced by the others' non-verbal clues as to what they were really feeling.

We see then that primitive emotional contagion may provide a solid foundation for helping friends, lovers, and family members communicate their feelings to one another, convey their solidarity, and behave in a smooth and coordinated way.

Further Readings

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Cross References (5-8)

Accuracy in Communication

Closeness

Emotion in Relationships

Emotional Communication

Empathy

Excitation Transfer Theory