



Nonverbal Communication

Nalini Ambady and Robert Rosenthal

Harvard University

- I. Importance of Nonverbal Communication in Health Care Settings
- II. Channels of Communication
- III. Nonverbal Skills
- IV. Nonverbal Communication and Social Influence
- V. Nonverbal Communication in Dyadic Interactions
- VI. Client Nonverbal Communication: Clues to Personality and Psychopathology
- VII. Provider Nonverbal Communication and Client Outcomes
- VIII. Conclusions

Channel A specific source of nonverbal behaviors: for example, the face, the body, or tone of voice.

Decoding Detection of true feelings, states, or messages from observed nonverbal behavior.

Empathy Process of understanding another's feelings or thoughts, and experiencing those feelings or thoughts to some degree.

Encoding Display of nonverbal behavior that may be decoded by others.

Leakage Nonverbal behavior displayed without intention or awareness, revealing true feelings or affective states.

Rapport A relationship between individuals characterized by mutual attentiveness or involvement, high positivity or warmth, and high levels of behavioral coordination.

Social Influence Process of one person's behavior affecting the behavior of another.

Synchrony A high level of behavioral coordination between individuals characterized by interaction

rhythm, simultaneous movement, and behavioral meshing.

NONVERBAL COMMUNICATION refers to the communication and interpretation of information by any means other than language. Nonverbal communication includes communication through any behavioral or expressive channel of communication such as facial expression, bodily movements, vocal tone and pitch, and many other channels. Nonverbal communication involves cues related to the communication (also referred to as the encoding or sending) of information as well as the interpretation (or the decoding or receiving) of information. The communication and interpretation of nonverbal behavior draws on tacit, implicit knowledge that all human beings possess. Such communication is often subtle, uncontrollable, spontaneous, rapidly and unconsciously communicated and interpreted, and provides a great deal of information regarding affective states. Although nonverbal communication can be controlled to adhere to cultural display rules (norms that regulate the expression of emotion) and to meet certain personal goals such as impression management or deception, such communication is generally a more automatic rather than controlled process. In this article, nonverbal communication refers to facial expressions, gaze, body movements, gestures, and tone of voice, as well as quasiverbal vocal behaviors such as interruptions, hesitations, and speech errors. We discuss the role of nonverbal communication in health care settings. These settings encompass the contact between medi-

cal providers, psychotherapists, physical therapists, occupational therapists, counselors, and other health care providers, and their clients.

I. IMPORTANCE OF NONVERBAL COMMUNICATION IN HEALTH CARE SETTINGS

Nonverbal communication is used to express and communicate thoughts, feelings, and emotions, to establish and maintain relationships, and to influence others. In health care settings, nonverbal communication is particularly important in establishing and maintaining the provider–client relationship and in influencing the client to comply with the treatment regimen. Nonverbal communication affects the provider, the client, and the relationship in the provider–client dyad.

The nonverbal communication of the provider is important for the client. Such communication can affect several important health-related outcomes, such as the client's adherence to treatment regimens, the client's recovery, and, ultimately, the client's survival. Clients are particularly sensitive to providers' nonverbal behaviors because they are often nervous and insecure and want to discern the true feelings of the provider. In seeking information about their health and prognosis, clients pay close attention not only to the information given by the provider, but also to the manner in which the information is communicated. A subtle gesture, a change in vocal tone, or too little or too much eye contact may result in a very different interpretation of a message by a client. Thus, often it is not what providers say but the manner in which they say it that leads a client to trust or mistrust or like or dislike them. Providers' nonverbal behaviors also contribute to provider expectancy effects. When providers communicate their expectations, they are often quite unaware that they are doing so in very subtle ways. These expectations are sensed and interpreted by the client and have important implications for recovery and healing.

The nonverbal communication of the client is also very important for the provider. Providers gather information about clients' physical as well as mental states from clients' nonverbal cues: clients may not always say what they really feel, but their nonverbal

cues might convey their true underlying feelings. For example, a client may deny being anxious, but the provider may sense anxiety from nonverbal cues.

Nonverbal communication in the provider–client dyad is important for establishing and maintaining the relationship. Positive communication in the dyad is related to greater mutual liking, empathy, rapport, and trust. These processes, in turn, are related to client compliance and to more positive outcomes for the client.

II. CHANNELS OF COMMUNICATION

A. Basic Channels

Typical channels of communication include facial expressions, eye gaze, bodily movements, gestures, and vocal cues, such as pitch, speech rate, and intonation.

1. Face

The face is one of the most expressive channels of communication, particularly for expressing emotions. Emotional expression occurs primarily through changes in the mouth, eyebrows, cheek and eye muscles, pupil dilation, and the amount and direction of gaze. Specific facial expressions for specific emotions have been observed in a variety of different cultures, suggesting that facial expressions of emotion may be universal. Facial expressions of happiness, anger, disgust, sadness, and combined fear and surprise are readily communicated across cultures.

2. Body

Bodily expression occurs through arm and hand gesturing, positioning of the trunk (leaning), positioning of the arms and legs, posture, and the angle of the body. The study of body orientation and positioning in relation to other people or the physical environment is called *proxemics*.

3. Gestures

Gestures that clarify or supplement speech are called *illustrators*. They help in communicating messages by giving a visual clarification—for example, pointing to an object. Gestures that can replace speech and have direct verbal meanings are called *emblems*. An example of a North American emblem would be the

thumbs-up sign. Emblems vary considerably across cultures.

4. Voice

The voice, also known as the paralinguistic channel, expresses feelings and emotions through pitch, intonation, speed, rhythm, pitch range, and volume.

Although the channels are described here separately, information from these channels is rapidly integrated to form and convey distinct impressions. For example, a smile, direct gaze, a forward lean, and a warm vocal tone all taken together convey interest and liking. However, direct gaze and a forward lean, without the smile and warm tone, taken together might convey dominance or intimidation.

B. Leakage Hierarchy

Nonverbal channels of communication can be ranked in terms of volitional controllability. The face is the channel that is most easily controlled, bodily movements are less controllable, and the voice is the least controllable of these three channels of communication. Lack of controllability in the channels of expression is associated with leakage of "true" emotions and attitudes. Thus, the most leaky of these three channels is the voice, followed by the body, and then the face. By paying careful attention to clients' bodily and vocal cues, providers may be able to detect underlying feelings and affect.

C. Deception

Deception is the expression of behavior that is inconsistent with the true thoughts and feelings of the encoder, sender, or actor. In certain situations, such as for the purposes of self-presentation, deceptive behavior is considered socially acceptable. For example, it is acceptable, or indeed expected, for employment interviewees to appear confident although they might actually feel quite nonconfident. In other situations, such as when people tell self-serving lies, deception is widely held to be unacceptable.

When lying, people tend to direct more attention to managing their facial expressions than to managing their bodily or vocal behaviors; they tend to move their face, head, and body less than when not lying. Moreover, when lying, people show more mis-

match between channels and more micromomentary facial expressions, lasting less than a quarter of a second. Deception is typically detected at rates only slightly higher than chance, although situational factors such as the relationship between the person lying and the target and the motivation of the person lying can increase the accuracy of detecting deception. [See DECEPTION.]

III. NONVERBAL SKILLS

Nonverbal skill is the term used to describe individuals' abilities to use nonverbal communication effectively and accurately. Nonverbal skills tend to be associated with enduring characteristics of people such as gender, personality, and culture. Generally, nonverbal skills are conceptualized in terms of two separate subskills: encoding skills and decoding skills.

A. Encoding Skills

Encoding skills (also called expressivity or legibility) refer to the ability to communicate emotions, attitudes, or other messages through nonverbal cues so that the observer can interpret the meaning of the message as the encoder intended. For example, a person scoring high on this skill would be able to convey emotions, such as empathy, accurately from nonverbal channels alone. Thus, more skilled encoders tend to be judged as more empathic when they are being empathic, and judged so purely from nonverbal channels such as the face or the voice. More-skilled encoders tend to be more popular, dominant, and extraverted than less-skilled encoders.

B. Decoding Skills

Decoding skills refer to individuals' abilities to interpret the nonverbal communication of other people. Good decoders are more accurate judges of nonverbal behavior. They tend to be better adjusted, more interpersonally democratic, more popular, less dogmatic, and are judged by others to be more interpersonally sensitive than poor decoders.

Both encoding and decoding skills vary considerably among people. Encoding and decoding skills are not very highly correlated; that is, a person can be good at one skill and not the other. In general, women

are more accurate encoders as well as decoders of nonverbal communication than men.

IV. NONVERBAL COMMUNICATION AND SOCIAL INFLUENCE

In any interpersonal relationship, people influence each other in multiple ways. This influence process, in which the behavior of one person affects the behavior of another person, is called social influence. In health care settings, social influence is related to important client outcomes. Health care providers can influence their clients in many ways. Moreover, because of the reciprocative nature of the relationship, clients can also influence the behavior of their providers, albeit in more subtle ways. Important sources of social influence include interpersonal expectations, power, gender, physical appearance, and culture.

A. Interpersonal Expectations

Individuals' expectations about each other's behavior can bring about actual changes in behavior. Thus, merely by expecting another person to fail or to succeed, an individual can facilitate the success or failure of that person. Expectations are conveyed through subtle nonverbal behaviors such as smiling, head nodding, leaning forward, and subtle changes in vocal tone. When individuals hold high expectations of others, they tend to behave more warmly and approvingly. When they have low expectations of others, individuals tend to behave more coldly and distantly. In health care settings, both providers and clients may facilitate or inhibit the behavior of the other. Because of their relative lack of power and control, clients are particularly sensitive to providers' subtle cues that indicate their expectations about a client's prognosis.

B. Power

Higher status generally allows for more flexibility and for more initiation of nonverbal behavior. Higher-status individuals tend to initiate more nonverbal behavior, including touch and gaze. Nonverbal behavior can be used strategically to gain compliance. A carefully timed smile, touch, or vocal inflection can help in gaining compliance with requests. In health care settings, providers have control over expertise, infor-

mation, and resources, and thus their behaviors have a great deal of influence on the relationship. Although clients are relatively less powerful, they can nevertheless exert power by disclosing or withholding information and by choosing whether or not to comply with treatment plans.

C. Gender

Females are more accurate decoders of most nonverbal cues. The overall superiority of females as decoders has been found in many different cultures. Females also tend to be more accurate encoders of emotional cues than males. Females are more nonverbally expressive; they smile, laugh, and gaze more at others than do males. They also stand closer to others, touch themselves more, and use their hands more expressively.

In dyadic interactions, particularly same-sex interactions, females exhibit more nonverbal involvement (closer distance, direct gaze, touch, direct body orientation, facial expressiveness, nods, and positive vocal cues) than do males. Females both initiate as well as receive higher levels of involvement.

Female clients tend to be given more information than male clients in medical visits, perhaps because they tend to ask more questions in general. Female clients also provide more information to physicians. In addition, female clients tend to be more expressive, and both male and female physicians tend to be more expressive with female clients. Female physicians are judged as more empathic than male physicians, especially with female clients. Female physician-female client dyads express the highest levels of eye contact and touching, and the closest interpersonal distances, whereas male-male dyads express the lowest levels of these behaviors.

D. Physical Appearance

Appearance and dress have considerable influence on interpersonal behavior and are likely to influence providers' and clients' impressions of and behavior toward each other. Attractive people are more popular and can exert more social influence. For example, physicians make more eye contact and orient their body more toward clients who are well groomed compared with disheveled clients. Attractive clients are also interrupted less by physicians.

Although physical attractiveness is a highly desirable quality, other factors such as situational factors, personality, and other communicative behavior also determine the impression, behavior, and influence of others.

E. Culture

Although facial expressions are universally encoded and decoded, there are considerable cultural differences in the usage of nonverbal cues. Hand gestures, with specific meanings (emblems), vary widely from culture to culture and serious misunderstandings can occur between people from different cultures in interpreting these gestures. Furthermore, there are cultural differences in the display rules for specific emotions. Thus, people from certain cultures are more likely to control their display of emotions to other people. People from cultures characterized as "high-contact cultures" stand closer to each other, gaze at each other more, touch each other more, and use a more direct body orientation toward each other than people from low-contact cultures. High-contact cultures include Latin American, Middle Eastern, and Southern European cultures, and low-contact cultures include Northern European, North American, and Asian cultures, although there are some exceptions. Because of familiarity with the appropriate cues, both the encoding and decoding of nonverbal cues seem to be more accurate within rather than between cultures.

Of particular importance to health care settings are cultural differences in the expression of pain. Providers should be aware that certain cultural and ethnic groups, such as high-contact cultures, express pain more readily than other more stoic, less-expressive groups. Sensitivity to cultural norms in the expression of pain as well as other negative states is, therefore, extremely important. [See PAIN.]

V. NONVERBAL COMMUNICATION IN DYADIC INTERACTIONS

In any interpersonal dyadic relationship, three theoretical concepts relating to nonverbal behavior are extremely important to successful communication and interaction of the participants. These three concepts—empathy, synchrony, and rapport—are particularly relevant to health care settings.

A. Empathy

Empathy refers to the process of understanding another person's feelings and thoughts and actually experiencing those feelings and thoughts to some degree. Clinicians' empathy is revealed through their nonverbal behavior. Empathic clinicians communicate positive affect through nonverbal behaviors such as head nodding and smiling, making more eye contact, leaning forward, and using a serious, warm, and relaxed tone of voice in communicating with clients.

B. Interactional Synchrony

Interactional synchrony in a dyad is characterized by simultaneous movement, interaction rhythm, and behavioral meshing of both members of the dyad. Synchrony is characterized by mutuality; whereas empathy is a phenomenon that occurs at the level of the individual, synchrony occurs at the level of the dyad. Postural mirroring between clients and therapists has been found to be positively related to empathy in counseling sessions.

C. Rapport

Rapport, like synchrony, is characterized by mutuality between the members of the dyad. Dyads high in rapport show mutual positivity or warmth, mutual attentiveness or involvement, and behavioral coordination between the members of the dyad. Behavioral coordination is reflected in posture similarity and in interaction synchrony. Members of high-rapport dyads show more "immediacy": they smile at each other, nod their heads, lean forward, gaze directly at each other, display a direct body orientation, have an open posture with uncrossed arms, and mirror each other's posture.

VI. CLIENT NONVERBAL COMMUNICATION: CLUES TO PERSONALITY AND PSYCHOPATHOLOGY

A. Personality and Nonverbal Behavior

Certain personality traits are related to stylistic differences in nonverbal communication. Three personality traits that show strong relationships to nonverbal

communication are extraversion, self-monitoring, and the Type A personality. Individuals possessing these personality traits display certain distinctive styles of nonverbal behavior. [See PERSONALITY.]

1. Extraversion

Extraverted people are more nonverbally expressive, are more skilled encoders of nonverbal behavior, and gaze more at others during conversations than do introverts. In contrast, introverted people are less expressive and tend to be better decoders rather than encoders of nonverbal behavior than extraverts.

2. Self-Monitoring

High self-monitoring is the tendency to monitor one's behavior in relation to others and to attend to the social appropriateness of one's actions. High self-monitoring is related to better nonverbal encoding as well as to better nonverbal decoding ability. High self-monitors tend to be more socially skilled in general and tend to pay more attention to social cues than do low self-monitors.

3. Type A/B Personality

Type A or "coronary prone" (prone to coronary heart disease or CHD) individuals tend to possess a distinctive nonverbal behavioral style. Such individuals have loud, dominant voices and tend to be more restless, impatient, aggressive, and hostile than Type B individuals, who are less prone to CHD. Type A individuals tend to make rapid facial and bodily movements, display loud, rapid, and explosive speech with short speech latencies, interrupt others, and express hostility and aggression nonverbally. Type A people tend to glare more at others and also tend to express more disgust than Type B people. An observational study revealed that individuals who were labeled Type A, based on a standard interview, showed more arm movements and were more restless during a relaxation period than non-Type A people. Thus, the behavior of Type A people carries over to nonstressful experiences, and providers should be sensitive to such behavior.

B. Psychopathology and Nonverbal Behavior

Certain specific combinations of nonverbal behaviors are related to different types of psychopathology. De-

pressed and schizophrenic patients, in particular, exhibit distinctive nonverbal behaviors.

1. Depression

Mentally ill individuals generally are less able to decode and encode nonverbal cues. For example, depressed people use fewer hand gestures, speak more slowly, show less pitch variation, and gaze less at their interactional partner both while listening and while speaking. Depressed people also show less facial activity and smiling. This slowed-down behavioral style characterizes depressed people across age, gender, and culture. As people become less depressed, eye contact, general movement, speech rate, and smiling increase.

Depressed individuals are also less sensitive to the nonverbal cues of others. They show poor discrimination among facial expressions of emotions and exhibit a negative bias when identifying emotions. There is some evidence, however, that depressed people are more accurate judges of real interactions between two other people. Depressed people tend to elicit a similar style of behavior from their partners. For example, infants of depressed mothers tend to show behaviors related to depression that are similar to those of their mothers. When paired with caregivers who are not depressed, however, these same infants do not show behaviors that are associated with depression. [See DEPRESSION.]

2. Schizophrenia

Nonverbal behaviors have been studied as indicators of other forms of psychopathology as well. Schizophrenic clients show stereotypic behaviors (such as rocking and grimacing), decreased hand gestures, less facial activity, less direct gaze, and a lack of coordination between their speech and their movements. Schizophrenic clients also tend to be poor decoders of affect, but this decrement is related to the chronicity and duration of the illness. [See SCHIZOPHRENIA.]

3. Other Psychopathology

Highly anxious clients tend to display behaviors such as hand-wringing, pacing, frequent posture shifts, uncoordinated speech, and decreased eye contact. Psychopaths tend to use more hand gestures, lean forward more, make more eye contact but smile less at their therapists than nonpsychopaths. People under the influence of alcohol are less able to decode affect and nonverbal behaviors. Violent individuals require a

greater distance from others to feel comfortable in interpersonal situations compared with nonviolent controls. Although these findings are promising, a great deal of work still needs to be done to systematically identify nonverbal indicators of psychopathology.

VII. PROVIDER NONVERBAL COMMUNICATION AND CLIENT OUTCOMES

A. Providers' Skills

Physicians' nonverbal skills have been found to predict client satisfaction and compliance. Physicians who are more accurate at judging interpersonal cues expressed by the body tend to have the most satisfied clients. Furthermore, physicians who are better at encoding nonverbal emotion cues have more satisfied clients who show better treatment compliance. In addition, physicians who are better encoders have a larger workload than do poorer encoders. Thus, the nonverbal encoding and decoding skills of treatment providers seem to be quite important in predicting client satisfaction and compliance.

B. Providers' Nonverbal Behaviors

The majority of studies that have examined the relationship between nonverbal behavior and therapeutic or health-related outcomes have been analogue studies rather than studies of actual treatment sessions, thereby limiting the generalizability of the findings. The summary provided in this section relies mostly on analogue studies that have examined behaviors of counselors and clients.

Studies reveal that affiliative behaviors such as smiling and head nodding that indicate positive affect are related to more positive judgments of counselor empathy and competence. In addition, high immediacy behaviors such as close proximity between the client and therapist, forward lean, open arm and leg postures, facing one another, and direct eye contact are related to the creation of an open, warm environment and a positive, involved relationship between the therapist and the client. Eye contact has also been found to be positively related to ratings of respect and genuineness on the part of the therapist. But either too much or too little of these behaviors can have negative consequences; there seems to be a curvilinear relation-

ship between nonverbal cues and client-therapist affect.

Besides posture and eye contact, therapists' frequency of movement influences judgments about their competency. Therapists who were more active were judged as more warm, energetic, trustworthy, responsive, and agreeable. Furthermore, clients of therapists who nodded more expressed more satisfaction with the therapeutic work. Interestingly, very little information is needed to judge therapist empathy: accurate evaluations of therapists' empathy and warmth have been obtained from photographs of the therapists' faces while interacting with clients.

Tone of voice is an extremely important channel in health care settings. The voice is closely attended to because it is thought to convey true feelings in addition to carrying verbal messages. Auditory cues such as vocal intensity and pitch level distinguish between therapists' exceptionally good (peak) and poor hours. During poor hours, therapists sound uninvolved and dull, whereas during peak hours, they sound relaxed and warm. Furthermore, physicians who sounded more anxious were more successful at treating alcoholic clients than physicians who sounded less anxious.

Sometimes combined cues from different channels convey important messages. For example, clients in one study expressed the most satisfaction when doctors conveyed a positive verbal message in a negative tone of voice, thus simultaneously communicating concern and acceptance.

VIII. CONCLUSIONS

Nonverbal communication is extremely important in affecting client outcomes in health care settings. Nonverbal communication in the client-provider relationship is dynamic, interactive, and reciprocal. Providers' nonverbal behaviors affect client behaviors and vice versa. This social influence process often occurs through subtle and unconscious cues and can have profound consequences for the provider-client relationship and client outcomes.

ACKNOWLEDGMENTS

Work on this manuscript was supported by grants from the Bayer Institute for Health Care Communication and the National Science Foundation.

BIBLIOGRAPHY

- Blanck, P. D., Buck, R., & Rosenthal, R. (Eds.). (1986). *Nonverbal communication in the clinical context*. University Park, PA: Pennsylvania State University Press.
- Hall, J. A., Harrigan, J. A., & Rosenthal, R. (1995). Nonverbal behavior in clinician-client interaction. *Applied and Preventive Psychology, 4*, 21-37.
- Knapp, M. L., & Hall, J. A. (1992). *Nonverbal communication in human interaction* (3rd ed.). New York: Harcourt Brace Jovanovich.
- Roter, D. L., & Hall, J. A. (1992). *Doctors talking with clients/clients talking with doctors: Improving communication in medical visits*. Westport, CT: Auburn House.
- Wiener, M., Budney, S., Wood, L., & Russell, R. L. (1989). Nonverbal events in psychotherapy. *Clinical Psychology Review, 9*, 487-504.