A Method for Teaching About Verbal and Nonverbal Communication

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A method for teaching about verbal and nonverbal communication is described. The Interpersonal Perception Task (IPT) consists of a videotape of 30 brief scenes. Viewers answer interpretive questions by decoding the verbal and nonverbal cues in the scenes. Information is presented in all communication channels; several categories of interaction are represented; and for each scene, there is an objective criterion of accurate judgment. Instructional techniques using the IPT highlight the subtlety and complexity of communication cues, teach about specific cues to accuracy, demonstrate the relative importance of communication channels, and help students understand the process of interpretation.

The study of verbal and nonverbal communication has assumed a prominent role in psychology during the past 20 years (Knapp, 1978; Patterson, 1983). Nonverbal behavior discloses critical information about emotions and relationships (Hickson & Stacks, 1985). Even barely perceptible nonverbal behaviors can have interpretable meaning—for example, we can recognize a person's facial expressions of emotion from as little as a 1/24th-s exposure (Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979). Research on social intelligence shows that it is possible to interpret people's behavior, feelings, and relationships from something as simple as a photograph (Archer, 1980). Nonverbal cues are often more powerful and reliable than verbal cues (Archer & Akert, 1984).

Researchers are also investigating the process of interpretation—how we use nonverbal cues to form impressions and conclusions about others. Correct interpretation is a remarkable feat because, in any interaction, hundreds or thousands of verbal and nonverbal cues stream by us, vanishing in milliseconds. How do we discard most of these cues, seizing the few (e.g., a momentary facial expression, a vocal inflection) that tell us what another person means or is feeling? The process of interpretation is one of the most impressive and least understood of human abilities.

Research attests to the importance of subtle expressive behaviors in how we communicate with others and in how we interpret their behavior. However, teaching about verbal and nonverbal behavior is a difficult challenge because the subtlety and complexity of verbal and nonverbal behavior are difficult to convey in lectures and readings. Students often come away with the impression that there is a simple codebook of nonverbal cues—that specific cues have invariant and unambiguous meanings.

This article describes instructional techniques that make use of the Interpersonal Perception Task (IPT). These techniques sensitize students to the variety and complexity of verbal and nonverbal cues, facilitate classroom discussion, and help students understand the process of interpreting these cues.

The IPT

The IPT consists of a videotape of 30 brief (20 s to 60 s) scenes. Every scene is paired with a multiple-choice question that has two or three options. The questions appear on the screen before each scene. Viewers are asked to reach a conclusion about the people who appear in the scene that follows. A 6-s blank interval on the videotape enables viewers to enter their responses on an answer sheet after each scene.

The design of the IPT is best conveyed by describing a few scenes. The first scene shows a woman and a man having a conversation with two 7-year-old children. The question corresponding to this scene is “Who is the child of the two adults?” A second scene shows a man first telling his true life story and then, after a pause, telling a completely fabricated version of his life story. The question posed is “Which is the lie, and which is the truth?”

In the IPT, accuracy can always be verified against an external standard. In the examples just mentioned, one of the children is the child of the two adults, and one of the two versions of the man’s life story is a lie. For every scene, there is an objectively correct answer, which is verifiable and unambiguous.

The IPT has four other important design features:

1. Every scene contains a full communications repertoire, with information presented naturally in all channels (verbal, vocal paralanguage, and nonverbal behavior). Because natural streams of behavior are used, clues to correct interpretation can be found in a variety of channels.

2. All scenes contain spontaneous behavior and unscripted conversation. The 30 brief scenes were extracted from longer videotaped interactions.
3. A total of 54 different encoders (28 females and 26 males ranging in age from 18 months old to 67 years old) appear in the videotape. Each scene shows one to four people.

4. There is a coherent content focus. Viewers are asked to reach conclusions about five types of social interaction: status, kinship, intimacy, competition, and deception. There are six scenes for each of these areas.

The IPT challenges viewers to identify the right answer to each question by using the broad range of communication present in each scene (e.g., facial expressions, words, tones of voice, hesitations, eye movements, gestures, personal space, posture, and touching). The cues occur simultaneously in the scenes, just as they do in everyday life. The IPT has been shown to be both valid and reliable, and previous research indicates that performance on the task relates to social skills that are important in everyday life (Costanzo & Archer, 1989).

**Instructional Uses of the IPT**

**Are People Just Guessing?**

The simplest use focuses on audience accuracy for specific scenes or for the whole videotape. In making interpretations like those involved in the IPT, people may feel that they are choosing an answer at random. However, even when people feel they are guessing, they almost always reach correct conclusions at well above chance levels of accuracy. A quick test of whether people are "just guessing" is whether or not performance exceeds chance.

The multiple-choice format makes it possible to determine whether viewers are more accurate than chance would predict. After a portion of the IPT has been shown, the instructor can read aloud the correct answers while students score their own tests for accuracy. The instructor can ask for a show of hands of those who chose each answer. This show of hands illustrates dramatically that people are not choosing answers randomly but, instead, are systematically decoding the informative cues present in the scenes. Accuracy rates can also be used to identify scenes that are relatively easy or difficult.

**Comparing Verbal and Nonverbal Cues**

The IPT can be used to sensitize students to the varieties and importance of different communication channels. One way to approach this issue is to ask, "What cues found in nonverbal communication are unavailable in words alone?" A simple demonstration involves contrasting the usefulness of purely verbal information with the richer cues available in full-channel (verbal + nonverbal) communication. One way to do this is to compare the accuracy of students given only verbal transcripts of IPT scenes (written transcripts are included) with the accuracy of students shown the IPT videotape. Research indicates that the interpretability of words is overshadowed by the power of nonverbal cues (Archer & Akert, 1984). The group using verbal transcripts will be less accurate than the group with access to both verbal and nonverbal cues.

Alternatively, an entire class can be asked to determine the answers for several scenes using the transcript alone. Then, the same scenes can be shown using the full-channel videotape to see whether (and why) people would revise their original judgments.

**Student Interpretations of Specific Cues**

Another instructional technique involves focusing on viewer perceptions of potentially important cues. A good way to do this is to invite comments about why people chose a specific answer. The video can be stopped after a given scene to ask members of the audience two questions: "What do you think the correct answer is?" and "What specific cues led you to choose this answer?" This process is valuable and informative, because viewers will cite quite different cues, even if they agreed on the answer.

There is usually a high level of consistency across channels, and many different cues can lead a viewer to the correct interpretation (Archer, 1980). This tendency toward consistency usually produces a high level of redundancy across channels. The varied cues cited by viewers demonstrate that cues to correct interpretation are available in many channels simultaneously and that there are several paths to the correct answer.

Viewer perceptions provide a lively source of classroom participation because different people do not decode scenes in precisely the same way. The perceptions of people who chose an incorrect answer are also important because the cues that lead people astray will become apparent. Viewers who reach the correct judgment may have noticed these misleading cues, but assigned them less weight in their interpretation process. The IPT includes some illustrative viewer perceptions for each of the five scene types.

**Silent Cues**

Facial expressions, gestures, and other nonverbal behaviors usually occur along with words and act to change the perceived meaning of words. In many cases, however, nonverbal acts have independent meaning. It is easy to use the IPT to demonstrate the power of this "silent language." Scenes can be shown with the audio level on the TV monitor turned off. Students can use the cues they have available (e.g., facial behavior, gestures, eye contact, touching) to answer the questions.

This approach encourages viewers to focus exclusively on nonverbal behavior—for example, to determine if people are lying merely by watching (but not hearing) them. After students have tried answering the IPT questions using only visual cues, the scenes can be replayed with the audio. Do they change their answers? If so, what reasons do they give? Remind students that playing the videotape silently not only removes verbal cues, but also the important cues found in vocal paralanguage (e.g., pauses, tone of voice, and interruptions). This exercise also illustrates that verbal cues and vocal paralanguage are especially important for decoding some types of scenes (e.g., deception).
Subjective and Objective Accuracy

The process of interpreting verbal and nonverbal cues is only partly understood. However, it is clear that the processing of cues is not entirely conscious and that people have imperfect awareness of the cues they use (Smith, Archer, & Costanzo, in press). One way to encourage students to focus on process is to ask them to provide a confidence rating for each answer (e.g., a value between 0% to 100%). Students can also be asked to estimate the total number of items they answered correctly for some portion of the IPT. These subjective estimates can be compared to accuracy scores.

After a segment of the IPT has been shown, the instructor can announce the correct answers. If viewers are more accurate on the scenes they felt more confident about, it indicates that they were able to identify (and were consciously aware of) specific cues. If viewers were unexpectedly right (or unexpectedly wrong) on specific scenes, it may be that they were reaching interpretations without full awareness. Because the process of interpretation seems to rely on different types of cues (those we can articulate and those that we are not conscious of), both outcomes are possible.

This exercise sensitizes students to the tenuous relation between confidence and accuracy. Frequently, there is an overconfidence effect: People believe they scored higher than they actually scored, and most people think that they scored significantly better than average.

Using the IPT to Introduce Research Findings

The IPT is also useful for introducing important findings and current issues in the field of nonverbal behavior. For example, a substantial body of research indicates that women are somewhat more accurate than men at decoding nonverbal behavior (Hall, 1985). Research using the IPT supports this conclusion. Women may be better decoders because they detect more nonverbal cues or, perhaps, because they interpret what they detect differently. Before telling students about this gender difference, it is useful to ask them to indicate (by a show of hands) if they think men or women do better on tasks like the IPT. The introduction of this issue leads quite naturally to a discussion of differences in male and female socialization that may produce females' decoding advantage.

The IPT can also be used to prompt discussions of unresolved issues in the study of communication. An example is the question of whether there are "special" decoding abilities: Would police detectives be unusually skilled at decoding deception scenes? Would parents be more accurate than nonparents at identifying parent-child relationships in the kinship scenes? Would athletes be better able to spot winners and losers in the competition scenes? The answers are not yet clear, although research on the issue of special abilities is in progress.

Another set of unresolved issues concerns the role of cultural factors in verbal and nonverbal communication. For example, would interactions between status unequals be more formal (and, therefore, more easily decoded) if filmed in Japan? Would parent-child interactions be recognizable across cultural boundaries, or is there something uniquely American about the interactions depicted in the IPT? Assuming that the problem of verbal translation could be solved, would there still be a problem of nonverbal translation? Would a college student in China, Zaire, or Brazil have trouble decoding some scenes? The expressive behaviors present in the scenes are more complex than simple smiles or frowns (which may be universally recognizable), and it may help to be a cultural "insider" when trying to answer questions like those on the IPT.

Evaluation of the IPT as a Teaching Method

The pedagogical effectiveness of these exercises was evaluated in two social psychology classes. Theories and research findings on communication processes were summarized in both classes. One class (n = 34) received this information in traditional lecture format. The other class (n = 30) received the same information, but most of the material was presented via the exercises just described. Presentations to both groups included an outline of communication channels; examples of how different channels complement, reinforce, or contradict each other; and discussions of the readability of verbal and nonverbal cues.

Two weeks after the presentations, students in both groups took a midterm exam, which included the communication material. The exam contained three multiple-choice questions and one essay question on communication processes. Although the lecture group and the IPT group did not differ in the number of multiple-choice questions answered correctly (lecture group M = 2.03; IPT group M = 2.33), t(62) = 1.48, p < .072, one-tailed, the IPT group performed significantly better on the essay question (lecture group M = 10.68; IPT group M = 12.07), t(62) = 2.83, p < .01, one-tailed. The essay was scored using a grading scale on which 15 was equal to an A+ and 1 was equal to F-. The grader was blind to group membership. Finally, a global index of student interest and enjoyment was obtained by asking students to grade the overall quality of the presentations using the 15-point grading scale. The IPT group rated the presentation significantly higher than did the lecture group (lecture group M = 12.35; IPT group M = 13.60), t(62) = 2.93, p < .01.

These findings appear to indicate that use of the IPT offers advantages over the traditional lecture. Students gained a more sophisticated understanding of communication processes and rated the approach as preferable to a standard lecture. We also note a more qualitative, impressionistic finding: Use of the IPT produced greater student involvement and fuller, more wide-ranging discussions. The pattern of findings suggests that the IPT is an effective means of presenting complex material and promoting student involvement and participation.

A Cautionary Note: Feedback on Individual Performance

The IPT is designed for research and instructional uses. Although researchers sometimes communicate their findings to research participants, information about individual performance is usually not provided. In instructional settings, however, students are accustomed to being told how
they scored on a particular task. We have found that students are usually eager to learn their IPT scores. A problem may arise if students interpret their score as an infallible indication of interpersonal sensitivity. It would be a disservice to allow students who obtain low scores to feel that they are poor judges of behavior. This negative feedback could outweigh the learning benefits of the IPT.

If people are told their overall scores, they should also be told that performance is probably influenced by several factors: motivation, practice, viewing conditions, fatigue, attention, and experience with similar tasks. It should also be pointed out that the IPT focuses on interpreting the behavior of unfamiliar others—it does not directly address the perception of one's intimates and acquaintances or other dimensions of social intelligence, such as judging motives or personality characteristics. Providing this information suggests alternative explanations for poor performance and cautions students against drawing sweeping conclusions on the basis of their score.

The classroom exercises described here do not require giving students information about their total score. These exercises are designed to focus attention on the process of interpretation and the nature of verbal and nonverbal behavior, not the issue of individual accuracy. As a teaching device, the IPT highlights the subtlety and complexity of expressive behavior and promotes active learning by presenting social interaction in a vivid and involving manner.

References


Notes

1. The IPT is available from the University of California Media Extension Center, 2176 Shattuck Avenue, Berkeley, CA 94704. Telephone: (415) 642-0460. Rental price is $36.

2. Preparation of this article was supported by a Faculty Research Grant from Claremont McKenna College to Mark Costanzo.

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Classroom Demonstration of Behavioral Effects of the Split-Brain Operation

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This article presents a method for simulating the behavior and perceptual deficits demonstrated by patients who have undergone the split-brain, or commissurotomy, surgical procedure. The volunteers sit next to each other in a manner that requires them to accomplish certain tasks as one person. Several easily staged activities, which require only readily available materials, show how split-brain patients illustrate certain lateralized cerebral hemispheric functions.

Various lab assignments and computer simulations illustrate the effects of the surgical procedure referred to as the commissurotomy. Most introductory psychology textbooks include descriptions of patients' behavior after the split-brain operation, but most of the examples are anecdotal. No demonstration exists to illustrate to students the potential subjective experiences of such patients.

The following demonstration allows students to partici-