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ABSTRACT

The encoding and decoding of verbal and nonverbal cues is basic to the process of social interaction. A method of teaching about verbal and nonverbal communication--the Interpersonal Perception Task (IPT)--consists of a videotape divided into 30 brief scenes. After each scene viewers answer an interpretive question by decoding the verbal and nonverbal cues present in the scene. Five categories of interaction are represented: deception, kinship, status, competition, and intimacy. Information is presented in all communication channels, and for each scene there is an objective criterion of accurate judgment. Several instructional uses of the IPT are designed to highlight the subtlety and complexity of communication cues, teach about specific cues to accuracy for the five types of interaction depicted, demonstrate the relative importance of communication channels, and help students understand the process of interpretation. (Eighteen references are attached.) (Author/SR)

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Teaching About Verbal and Nonverbal Communication: A New Approach

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### Abstract

The encoding and decoding of verbal and nonverbal cues is basic to the process of social interaction. A method of teaching about verbal and nonverbal communication is described. This method--the Interpersonal Perception Task (IPT)--consists of a videotape divided into 30 brief scenes. After each scene, viewers answer an interpretive question by decoding the verbal and nonverbal cues present in the scene. Five categories of interaction are represented--deception, kinship, status, competition, and intimacy. Information is presented in all communication channels, and for each scene there is an objective criterion of accurate judgment. Several instructional uses of the IPT are described. These techniques are designed to highlight the subtlety and complexity of communication cues, teach about specific cues to accuracy for the five types of interaction depicted, demonstrate the relative importance of communication channels, and help students understand the process of interpretation.

**Teaching About Verbal and Nonverbal Communication: A New Approach**

The study of verbal and nonverbal communication has assumed a prominent role in psychological research during the past two decades (Knapp, 1978; Ekman, 1985; Patterson, 1983). Nonverbal behavior discloses critical information about emotions and relationships (Henley, 1977; Hickson & Stacks, 1985), and even barely perceptible nonverbal behaviors can have interpretable meaning--for example, we are able to recognize a person's facial expressions of emotion from as little as a 1/24th sec exposure (Rosenthal, Hall, DiMatteo, Rogers, and Archer, 1979). Similarly, research on "social intelligence" shows that it is possible to interpret other people's behavior, feelings, and relationships even from something as simple as a single photograph (Archer, 1980). It is also clear that nonverbal cues are often more powerful and reliable than verbal cues (Archer & Akert, 1977a, 1984).

In addition to discovering the meaning of specific nonverbal acts, researchers are investigating the process of interpretation: How we use nonverbal cues to form impressions and conclusions about other people. The correct interpretation of nonverbal cues is a remarkable feat because, in any interaction, hundreds or even thousands of verbal and nonverbal cues stream by us, vanishing in milliseconds. How do we discard most of these cues, seizing instead on the few (a momentary facial expression, a "catch" in the voice, a fleeting gesture) that tell us what another person means or is really feeling? The process of interpretation is one of the most impressive and least understood of human abilities (Archer & Akert, in preparation).

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

This paper describes several instructional uses of the Interpersonal Perception Task. These uses are intended to sensitize students to the variety and complexity of verbal and nonverbal cues, to facilitate classroom discussion, and to help students understand the process of interpreting these cues.

#### The Interpersonal Perception Task (IPT)<sup>1</sup>

The IPT consists of a videotape divided into 30 brief (20 to 60 sec) scenes. Every scene is paired with a multiple-choice question that has two or three possible answers. 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 six sec 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 of the scenes. For example, the first scene shows two adults (a male and a female) having a conversation with two seven year-old children. The question corresponding to this scene is "Who is the child of the two

adults?" In another scene, two women discuss a game of racquetball they have just finished playing; viewers are asked to decide which woman won. A third 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 of viewers is "Which is the lie and which is the truth?"

In the IPT, accuracy can always be verified against an external standard. The question paired with each scene was chosen on the basis of objective information. In the examples just mentioned, one of the children is in fact the child of the two adults; one of the two women did win the racquetball game; and one of the man's two versions of his life story is in fact 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) All scenes contain spontaneous behavior and unscripted conversation. Genuine relationships and experiences are used to maximize the naturalism of the captured behavior. Brief segments were extracted from longer interactions to compile the 30 scenes.

(2) Every scene contains a full communications repertoire, with information presented naturalistically in all channels (verbal, vocal paralinguistic, and nonverbal behavior). Because natural streams of behavior are used, cues to correct interpretations can be found in a variety of channels.

(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 the viewer to identify the right answer to each question by using the broad range of communication present in each scene--facial expressions, words, tones of voice, hesitations, eye movements, gestures, person's space, posture, and touching. These different channels of nonverbal communication occur simultaneously in each scene, 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 IPT relates to social skills that are important in the context of everyday life (Costanzo & Archer, 1989).

The IPT is available through the University of California Media Extension Center; 2176 Shattuck Avenue, Berkeley, CA 94704. Telephone: (415) 642-0460.

#### Instructional Uses of the IPT

##### Are People Just Guessing?

Although there are many ways the IPT can be used, one of the easiest focuses on audience accuracy for specific scenes and for the videotape as a whole. 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 merely 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 alone would predict. If viewers perform above chance levels of accuracy, it indicates that they have decoded the useful, interpretable cues in the scene. Accuracy rates can also be used to identify IPT scenes that are relatively easy or difficult.

After a portion of the videotape has been shown, the instructor can read aloud the correct answers while students score their own accuracy. The instructor can ask for a show of hands for the people who chose answer "a", answer "b", or answer "c". A show of hands will illustrate dramatically that people are not choosing answers randomly but, instead, are systematically reaching the correct answer.

#### 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 students, "What kinds of cues are found in nonverbal communication that are unavailable in words alone?" A simple class demonstration involves contrasting the usefulness of purely verbal information with the far 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 of the scenes 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, 1977a). Students using verbal transcripts will be far less accurate than students using both verbal and nonverbal cues.

Alternatively, students can be asked to determine the answer for several scenes using the transcript alone. When they are finished, these same scenes can be shown using the full-channel videotape to see whether (and why) students 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 from students about why they chose a specific answer. That is, what was it about the interaction in the scene that led them to their conclusion? This process can be valuable and informative, partly because viewers will cite quite different cues, even if they agreed on the answer to a particular question. The IPT is accompanied by some illustrative viewer perceptions for each of the five scene types.

Instructors can focus on a few scenes. The video can be stopped after a given scene to ask members of the audience two questions: (1) "What do you think the correct answer is?", and (2) "What specific cues led you to choose this answer?" The varied cues cited by viewers will demonstrate that cues to correct interpretation are available in many channels simultaneously and that there are multiple paths to the correct answer.

Viewer perceptions can be interesting as well as highly original. Research indicates that there is usually a high level of consistency

across channels and that many different cues can lead a viewer to the correct interpretation (Archer, 1980). One reason that this occurs is that an encoder may try (perhaps unconsciously) to make different types of nonverbal behavior consistent (Archer & Akert, 1980). For example, when we wish to communicate something positive, we may unconsciously try to make our words, voice, face, posture, and other nonverbal behavior consistent across all communication channels. The tendency toward consistency usually produces a high level of redundancy across channels. Consequently, the meaning of our behavior can be read from many different cues.

Viewer perceptions provide a lively source of classroom participation because no two people decode a scene in precisely the same way. These differences make for fascinating comparisons. The perceptions of people who decode the scene incorrectly are also important, because the cues that lead people astray will become apparent. Students who reach the correct judgment may have noticed these misleading cues, but assigned them less weight in their interpretation process.

#### 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 occasional power of this "silent language." Scenes can be shown with the audio level on the TV monitor turned off. Students can be asked to use the cues they have available

(facial behavior, gestures, eye contact, proxemic behavior, posture, activity level, touching) to try to answer the interpretive questions.

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

#### Subjective and Objective Accuracy

The process of interpreting verbal and nonverbal cues remains 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 in understanding behavior (Archer & Akert, 1980; Costanzo & Archer, in preparation).

One way to encourage students to focus on process is to ask them to indicate on their answer sheet not only their answer to each question but also a "confidence rating" (e.g., a value between 0% to 100%). This rating should reflect their degree of confidence that the answer they have chosen is correct. 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 then be compared to their actual scores.

After a segment of the videotape has been shown, students can be told the correct answers. How close were their estimates of the number of items answered correctly and the actual number of items answered correctly? Were students more accurate on the scenes they felt more confident about? If so, this may indicate that they were able to identify (and were consciously aware) of specific cues. If people were unexpectedly right (or unexpectedly wrong) on specific scenes, it may be that they have been 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 helps to sensitize students to the tenuous relationship between confidence and accuracy. Frequently, there will be an overconfidence effect: People will believe they scored higher than they actually scored, and most people will think that they scored significantly better than average (Costanzo & Archer, in preparation).

#### Using the IPT to Introduce Research Findings

In addition to the five teaching strategies described above, the IPT is useful for introducing important findings and current issues in the field of nonverbal behavior. One important finding concerns gender differences. A substantial body of research indicates that women are somewhat more accurate than men at decoding nonverbal behavior (see Hall, 1985). Research using the IPT lends additional support to this

conclusion. Before telling students about this gender difference, it is useful to ask students to indicate (by a show of hands) if they think males or females do better on tasks like the IPT.

Women may be better decoders because they detect more nonverbal cues or, perhaps, because they interpret what they detect differently. The introduction of this finding leads quite naturally to a discussion of differences in male and female socialization that may produce the decoding advantage of females.

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

A second set of unresolved issues concern 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 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 much more trouble trying to decode 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 the exercises described above were evaluated using two classes in social psychology. Theories and research findings on communication processes were summarized in both classes. One class received this information in the form of a traditional lecture. The other class received the same information, but most of the information was presented via the exercises described above. Presentations to both groups included an outline of communication channels, examples of how different channels compliment, reinforce, or contradict each other, and discussions of the "readability" of verbal and nonverbal cues. There were 34 students in the lecture group and 30 students in the IPT group.

Two weeks after the presentations, students in both groups took a midterm exam for the section of the course which included the 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 did perform 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 where 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 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 significant advantages over the traditional lecture approach. Students gained a more sophisticated understanding of communication processes and rated the approach as preferable to a standard lecture approach. We should also note a more qualitative, impressionistic finding: Use of the IPT produced greater student involvement and fuller, more wide-ranging discussions. This 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 own scores. A problem may

arise if students interpret their IPT score as an infallible indication of their own interpersonal sensitivity. It would be a disservice to allow students who obtain low scores to leave feeling that they are therefore poor judges of behavior. This negative feedback could outweigh the learning benefits of exposure to the IPT.

If people are told their overall scores, it is important to note that performance on the IPT 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.

It is important to note that the classroom exercises described above 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.

Emerging evidence (Costanzo & Archer, 1990; deTurck & Miller, 1990; Zuckerman, Koestner & Colella, 1985) indicates that the ability to interpret verbal and nonverbal cues can be improved through training. As a teaching device the IPT highlights the subtlety and complexity of

expressive behavior, and helps to promote active learning by presenting social interaction in a vivid and involving manner.

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