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ABSTRACT

A study investigated the importance of brief contemplation as a factor in the accuracy of judgments about other people, based on their nonverbal appearance. The following questions were addressed: (1) Are observers who are given time to contemplate the significance of nonverbal cues more accurate in their perceptual judgments than observers who make immediate decisions? (2) Do males and females differ significantly in the accuracy of their perceptual judgments? and (3) Do the effects of exposure time seem to operate similarly for observers of both sexes? Two-hundred fifty-five undergraduate students were told that they were viewing the slides of persons engaged in nonverbal behaviors as part of a research project designed to learn more about how accurately people can judge nonverbal information. Results indicated that observers given time to briefly contemplate the significance of nonverbal cues were no more accurate in their perceptual judgments than observers who made immediate decisions. Male and female observers did not differ significantly in the accuracy of their perceptual judgments. No significant difference was found concerning interactions between sex and the effects of exposure time. (EL)

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BRIEF CONTEMPLATION AS A FACTOR IN THE ACCURACY OF PERCEPTUAL JUDGMENTS

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SUMMARY

This study investigated the importance of brief contemplation as a factor in the accuracy of judgments about other people based on their nonverbal appearance. Subjects were asked to respond to multiple-choice questions about the relationships between people shown to them on slides. Results indicated that subjects allowed as little as two seconds to respond to the photographs were as accurate as S's who were permitted a full minute to contemplate the photos and their responses. Observer attributes including sex, age, size of hometown, and grade point average were shown not to be significantly correlated with accuracy.

A. INTRODUCTION

When people interact with one another in face-to-face situations there are scores of nonverbal messages sent and received during each minute. These occur, in part, through distance cues, facial expression, posture, gestures, touch, dress, and vocal cues. As a result, it seems that we have become accustomed, on a sub-conscious level, to processing this information and, in a sense, making snap decisions about others without careful conscious analysis. There is simply too much happening at once for

us to ponder the relevance of each cue. Tagiuri (23, p. ix) described the process well when he wrote "Regardless of the degree of skill which an adult may have in appraising others, he engages in it most of the time without paying much attention to how he does it." Anthropologist R. Dale Guthrie (23, pp. 203-204) says "We spend most of our waking hours exercising and refining our skills of human evaluation..it is so automatic we are hardly conscious of it. We are not alone in this behavior- aardvarks are excellent aardvark watchers, sparrows are great at watching sparrows, crocs at croc watching." Cuthill (7, p. 48) put it this way, "little of what is transmitted, at any level, escapes either party; all such information is analyzed instinctively, and neither party questions his impressions and reactions (experience has taught each of them to trust cues). Both would be hard put to explain how they know what they know."

The predominant mode of teaching nonverbal communication and attempting to increase students' awareness of it seems based on the notion that careful analysis of the available cues is likely to improve one's skill. For example, Knapp (14), in the best selling text in its field, *Nonverbal Communication in Human Interaction*, proposes a thorough "global analysis" which is designed to allow one to carefully glean much of the

information which is available to an observer. Popular self-help books have also sought to advance the desirability of applying reason to the deciphering of nonverbal messages (1,18). Donaghy (8, p.51), in his brief nonverbal communication text, claims "There is no question that some of the most extensive development of our nonverbal communication sensitivity can come from lectures and reading."

There is, however, a body of knowledge which suggests that the opposite may be true. As early as 1929, Gulliford(12), based on a thorough series of investigations, concluded that those who were most accurate in their judgments of nonverbal cues tended to be less analytical in their attitude. Estes (11, pp.234-235) compared various groups of people in their ability to accurately judge expressive behavior. He concluded that:

...college faculty members representing the fields of psychology, chemistry, mathematics, philosophy, economics and government, were reliably inferior in the number of correct judgments they made. The...best judges without exception reported that they did not attempt a deliberate analysis of what they read and observed as a preliminary to making a judgment. The "I think," "Let me reason this out" type of consciousness was absent. Typical of the reports of this group are the following: "I let myself go," "I gave myself over to it," "It did itself," "In the two cases when I argued and reasoned with myself, I made errors."

Archer (2) concluded that persons who attempt to utilize a logical approach based upon careful examination of the evidence do, in fact, tend to suffer from a reduced awareness of all of the available information.

It seems that practice and theory are incongruent. Encouraging people to carefully analyze nonverbal behavior may improve their sensitivity or may, in fact, have the opposite effect. This concern led to the following research question:

1. Are observers who are given time to contemplate the significance of nonverbal cues more accurate in their perceptual judgments than observers who make immediate decisions?

Research findings are incongruent concerning the comparable sensitivity of males and females. Some researchers have found that males and females do not differ in their sensitivity to nonverbal messages (4, 6, 10, 12). More recent investigations, however, have concluded that women are significantly more sensitive (3, 5, 9, 13, 26). This discrepancy led to the formulation of a second research question:

2. Do males and females differ significantly in the accuracy of their perceptual judgments?

Little is known concerning differences, if any, between how males and females decode nonverbal information. Does an increase in the exposure time of a nonverbal message favor either sex? Rosenthal and DePaulo (21) showed that women were less advantaged at reading visual cues of very short duration than they were for longer cues. The authors suggested that women were more polite decoders in that females refrained from decoding too efficiently those nonverbal cues which were under less control of the encoder. The issue of exposure time and gender was addressed in a third research question:

3. Do the effects of exposure time seem to operate similarly for observers of both sexes?

B. METHOD

1. Subjects

S's were 255 undergraduate students enrolled in communication courses at an eastern university. There were 133 females and 122 males.

2. Materials

This study used a series of ten slides of persons engaged in various nonverbal behaviors, e.g., smiling at each other, standing together. The slides were based on photographs used by Archer (2) and were of average difficulty when compared with others which had been validated in Archer's work. A questionnaire was used which allowed subjects to indicate the correct multiple-choice answer for each photograph. A sample response for a slide was:

These two people:

- a. are strangers posing together
- b. are brother and sister
- c. have been a couple for three months

3. Procedure

The subjects were told that they were viewing the slides as part of a research project designed to learn more about how accurately people can judge nonverbal information. Sixty-three males were exposed to each slide for two seconds and fifty-nine were permitted to contemplate each slide for sixty seconds before recording their decision. The numbers for females were fifty-seven and seventy-six, respectively. The slides were shown to groups

of approximately thirty persons each, with males and females about equally divided in each group. Subjects were allowed fifteen seconds between each slide to record their responses. Each subject could have obtained a possible score of ten if all questions were correctly answered. After viewing the slides and recording responses, each subject was asked to provide demographic information including age, sex, year in school, major, size of hometown, and grade point average.

C. RESULTS

With regard to the first research question, observers given time to briefly contemplate the significance of nonverbal cues were no more accurate in their perceptual judgments than observers who made immediate decisions ($F [1, 253] = .002$, ns .936). The mean score for subjects in the two seconds condition was 6.88, while the mean for subjects in the sixty seconds condition was 6.84. Regarding the second research question, male and female observers did not differ significantly in the accuracy of their perceptual judgments ($F [1, 253] = .927$, ns .336). The mean score was 6.79 for male subjects and 6.94 for female subjects. With regard to the third research question, concerning interactions between sex and the effects of exposure

time, a one-way analysis of variance between groups ($F [3, 251] = .638, ns$.563) revealed no significant differences. In addition, perceptual accuracy did not seem to be correlated with age, year in school, major, size of hometown, or grade point average. To confirm these results, a stepwise multiple regression was run with score as the dependent variable. Results indicated that none of the variables contributed to the variance associated with the scores ($F [6, 245] = 1.91, > .078, R^2 = .04$). Values of power ranged from .56 to .99.

D. DISCUSSION

The principle finding of this study- that time to briefly contemplate available nonverbal information did not improve observers' accuracy- has far reaching implications. We know very little about the ways through which we make quick decisions about other people. Our understanding of this process is hampered not only by a general lack of introspection on the part of almost everyone, but also by the overwhelming complexity of the process. Human beings are highly selective information processing systems who attend to only a very small amount of all the potential information available in a given interpersonal situation.

How do we choose which information to process and how is it processed? Perhaps each of us has, in a sense, a person perception "dictionary" which we employ to help us define, interpret, and categorize the behavior of others. When faced with a new situation we scan the available information, find cues or behaviors for which we have stereotypes, and then recall those stereotypes within a fraction of a second. Once having done this, we assume a mental attitude not unlike "Don't bother me with the facts; I've already made up my mind." The results of this study lend credence to such a theory.

Perhaps just as newborn infants may possess an innate ability to display their emotional states (24), so too might all of us have an innate ability to quickly interpret information about others. If nonverbal communication is not largely instinctive, perhaps it is scripted behavior. Langer (15) has defined scripted behaviors as those actions which people take with little or no conscious awareness. She has suggested that scripted behaviors are particularly likely to emerge when the situation is familiar and requires little mental effort.

A second major finding of this study concerns the lack of significant differences in the perceptual abilities of males and females. Whereas, it has

been widely held that females are superior to males in intuitive thinking, this study lends support to recent research indicating a trend toward androgeny in college-age subjects (17, 22, 25). The lack of significant correlations between demographic attributes of observers (age, college major, size of hometown, grade point average) and the accuracy of perceptual judgments suggests that, with regard to this task, college students tend to be quite homogeneous.

The results of this investigation have implications for people who wish to increase their perceptual abilities, or teachers who seek to increase the nonverbal sensitivity of others. No evidence was found to support the widely held belief that careful, conscious analysis of nonverbal cues present in a situation will result in improved accuracy. We need to learn much more about *how* successful observers reach their decisions and what they do differently from observers who are less successful. Future research should seek to isolate relatively good and poor judges of nonverbal behavior and then to compare these groups in terms of how they reach their judgments.

REFERENCES

1. Akeret, R. *Photoanalysis*. New York: Simon & Schuster, Inc., 1975.
2. Archer, D. *How to Expand Your Social Intelligence Quotient*. New York: M. Evans & Company, 1980.
3. Argyle, M. *et al.* The Communication of Inferior and Superior Attitudes by Verbal and Non-Verbal Signals. *Brit. J. Soc. & Clin. Psychol.*, 1970, 9, 222-231.
4. Bayley, N. Comparasons of Mental and Motor Test Scores for Ages 1-15 Months by Sex, Birth Order, Race, Geographical Location and Education of Parents. *Child Devel.*, 1965, 36, 379-411.
5. Buck, R. *et al.* Sex, Personality, and Physiological Variables in the Communication of Affect via Facial Expression. *J. Personal. & Soc. Psychol.*, 1974, 30, 587-596.

6. Coleman, J. Facial Expressions of Emotion. *Psychological Monog.*, 1949, 63, 1-36.
7. Cutbill, R. How to Read the Other Guy's Silent Signals. *Quest*, 1977, 6, 46-51.
8. Donaghy, W. Our Silent Language: An Introduction to Nonverbal Communication. Dubuque, Iowa: Gorsuch Scarisbrick, Publishers, 1980.
9. Eiland, R. and Richardson, D. The Influence of Race, Sex and Age on Judgments of Emotion Portrayed in Photographs. *Communication Monog.*, 1976, 3, 167-175.
10. Eisenberg, P. and Reichline, P. Judging Expressive Movement. *J. Soc. Psychol.*, 1939, 10, 345-357.
11. Estes, S. Judging Personality from Expressive Behavior. *J. Abn. & Soc. Psychol.*, 1938, 33, 217-236.

12. Gullford, J. An Experiment in Learning to Read Facial Expression. *J. Abn. & Soc. Psychol.*, 1929, 24, 191-202.
13. Kleck, R. and Nuessle, W. Congruence between the Indicative and Communicative Functions of Eye Contact in Interpersonal Relations. *Brit. J. Soc. & Clin. Psychol.*, 1968, 7, 241-246.
14. Knapp, M. Nonverbal Communication in Human Interaction. New York: Holt, Rinehart & Winston, 1978.
15. Langer, E. Rethinking the Role of Thought in Social Interaction. In **New Directions in Attribution Research**, eds. Harver, J., Ickes, W. & Kidd, R. Hillsdale, N.J. : Lawrence Erlbaum, 1978.
16. Langer, E. *et al.* The Mindlessness of Ostensibly Thoughtful Action: The Role of 'Placebic' Information in Interpersonal Interaction. *J. Personal. & Soc. Psychol.*, 1978, 36, 635-642.
17. McCallum, R. et al. Effects of Resource Availability and Importance of Behavior on the Experience of Crowding. *J. Personal. & Soc. Psychol.*, 1979, 37, 1304-1313.

18. Nierenberg, G. & Calero, H. How to Read a Person Like a Book.
New York: Simon & Schuster, Inc., 1973.
19. Rollman, S. The Sensitivity of Black and White Americans to Nonverbal Cues of Prejudice. *J. Soc. Psychol.*, 1978, 105, 73-77.
20. Rosenthal, R. et al. The Language Without Words. *Psychology Today*, September 1974, 64-68.
21. Rosenthal, R. and De Paulo, B. Expectancies, Discrepancies, and Courtesies in Nonverbal Communication. *Western J. Speech Communication*, 1979, 43, 76-95.
22. Smith, M.J., Reinheimer, R. and Gabbard-Alley, A. Crowding, Task Performance, and Communicative Interaction in Youth and Old Age. *Human Communication Res.*, 1981, 7, 259-272.
23. Tagiuri, R. Person Perception and Interpersonal Behavior. Stanford University Press, 1958.
24. Trotter, R. Baby Face. *Psychol. Today*, August 1983, 14-20.

25. Worchel, S. and Yohai, S. The Role of Attribution in the Experience of Crowding. *Journal Exper. Soc. Psychol.*, 1979, 15, 91-104.
26. Zuckerman, M. *et al.* Encoding and Decoding of Spontaneous and Posed Facial Expressions. *J. Personal. & Soc. Psychol.*, 1977, 34, 965-977.