ABSTRACT

White and black subjects, playing the role of teacher, were led to praise verbally a white or black student. It was hypothesized that the race of the student would affect the nonverbal behavior of the teacher. White and black judges, blind to the race of the students and to the hypothesis of the study, rated how pleased the facial expressions of the subjects appeared. Results of the white judges showed that white teachers appeared significantly more pleased when praising a white student than a black, but ratings of black teachers by white judges showed no significant difference. Ratings by black judges showed the opposite pattern: black teachers were seen as being significantly more pleased when teaching a black than a white student, while no difference was discerned by black judges among the white teachers. (Author/DB)
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RACE OF STUDENT AND NONVERBAL BEHAVIOR OF TEACHER

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Race of Student and Nonverbal Behavior of Teacher

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Race has long been acknowledged as having a major effect upon the teaching process and classroom situation. However, the mechanisms by which racial factors exert an influence upon the educational process are still not clearly understood. In the present paper, the relationship between race and teachers' nonverbal behavior are examined in an effort to identify at least one mediating factor for the effects of race. The purpose of the paper is to demonstrate that teachers' nonverbal behavior will vary subtly according to the race of the student they are teaching.

There is presently a good deal of evidence suggesting that nonverbal behavior gives a valid indication of an individual's actual feelings. For instance, Ekman (1965) manipulated subjects' affective feelings while secretly photographing the subjects. Untrained judges viewing sample still photos were able to discern the affect subjects felt. Mehrabian (1972) reported that positive affect is related to closer position, greater forward lean, more eye contact, and more direct body orientation toward an interactant. Ekman, Friesen, and Ellsworth (1972) reviewed data showing that facial expressions are related to emotions, and other such relationships were reported by Hall (1964), Exline and Winters (1965), and Mehrabian (1969). Hence, it seems clear from the literature that positive and negative affective states result in differential nonverbal behavior.

Furthermore, there are theoretical reasons and empirical data showing that the simple presence of a liked or disliked person can elicit an affect
which is either positive or negative, respectively. The rewarding or punishing quality of the mere presence of liked and disliked others has been demonstrated by Lott and Lott (1968, 1969). They suggest that interpersonal attraction can be viewed as attitudes towards persons and that positive attitudes may be defined as implicit anticipatory goal responses.

A liked person is seen as one who evokes implicit anticipatory goal responses as a result of previous association with reward or due to mediated or stimulus generalization. Thus, liked persons can be viewed as secondary reinforcing stimuli, and disliked persons as the equivalent of implicit anticipatory punishment.

In terms of the present problem, these findings imply that the mere presence of an individual should be sufficient to evoke nonverbal behavior in an interactant which is congruent with the attitude held regarding that individual. In fact, it may be possible that the immediate events within a dyadic interaction will be less influential in determining an individual's nonverbal behavior than the attitude the individual originally holds regarding the interactant, in cases where the prior attitude is strongly held.

These ideas relate quite directly to the case of white and black student-teacher interactions if it can be shown that individuals have strongly held differential attitudes regarding persons of the same race compared with those of the other race. This possibility appears to be well documented by evidence of both an anecdotal and an empirical nature (Allport, 1954; Katz, 1975; Simpson & Ying, 1972). The bulk of the research carried out to date suggests that both blacks and whites generally hold more positive attitudes toward others of their own group than towards members of the other racial groups. It is possible, then, that such differential attitudes and feelings are elicited during interracial interaction and are revealed nonverbally
regardless of the verbal behavior of the interactants. Thus, even under conditions in which same- and different-race students are acting similarly, leading a teacher to behave in a verbally identical manner, it is possible that differential nonverbal behaviors will occur.

In the present study, white and black teachers were led to praise verbally successful white and black students. The spoken content of this praise was identical for all subjects. It was hypothesized that the nonverbal behavior of the teacher would vary according to the race of the student, even when the verbal behavior was invariant.

**METHOD**

**Subjects**

Subjects, who acted as teachers, were 40 undergraduate females enrolled in introductory psychology classes. They received extra class credit for participation in a voluntary subject pool. Half the subjects were white and half were black.

**Procedure**

To observe subjects' nonverbal behavior under standardized conditions, a situation was devised which kept spoken behavior constant across all conditions. Subjects were told that they would be acting as a teacher to a third-grade student. They were given a brief lesson to teach their student on trapezoid identification, and then they were told to administer a 14-item test. The test presented both positive and negative instances of trapezoids, and the students' task was to identify the figure as an example or nonexample of a trapezoid.

Subjects were told that the test procedure, being of an experimental nature, required that they follow a set procedure in administering feedback.
When the student answered a test item correctly, he was to be told "right—that's good" and the teacher was to proceed to the next item. When the student responded incorrectly, the teacher was to correct the student and explain why the answer was wrong. It was emphasized that only the phrase "right—that's good" should follow each correct response.

To ensure that the students performed predominately well on the test, and thus provide instances in which subjects would be verbally reinforcing their student, confederates played the role of student. Unbeknownst to the subject, a set pattern of answers was supplied in code to the confederate. The confederate answered 12 of the 14 test items correctly and, to provide verisimilitude, two erroneously.

Two white male and two black male third-grade confederates were used. Subjects were randomly assigned to teach one of the confederates with the restriction that each confederate be used an equal number of times. Since the race of the subject was also varied, subjects were assigned to confederates in a way that resulted in half the white subjects teaching a white confederate and half a black confederate, while half the black subjects taught a white and half taught a black confederate.

Video tapes were made covertly of subjects' faces as they administered the test to the confederate. The confederates could not be seen in the recordings. A standard 20-second silent portion of each subject's behavior was edited onto a new video tape. The sample included three instances in which the subject verbally praised the confederate. Samples from all subjects were randomly ordered on the new, edited tape.
The 40 edited samples were shown separately to a group of 12 college-age white judges and 20 college-age black judges, who were blind as to the hypothesis of the study. The judges were told only that they would be seeing a series of individual teachers who were administering a set of exercises to their student. After viewing each silent sample, the judges were asked to rate, using a six-point scale, how pleased the teacher appeared to be with the student. The points of the scale ranged from "very pleased" to "very displeased" with the student. (It should be reiterated that the race of student could not be seen on the video tape).

RESULTS

Data from the white and black judges were analyzed separately. For each racial group's ratings of how pleased the subject appeared to be with her student, two orthogonal planned comparisons were carried out. One contrast compared judges' ratings of white subjects who were verbally reinforcing a white confederate with white subjects verbally reinforcing a black confederate. The second planned comparison contrasted judgments regarding black subjects praising a white student with black subjects praising a black student.

White judges' ratings. Results of the white judges' ratings showed that white teachers were rated as being significantly more pleased with their student when they were praising a white student than a black student ($F=8.32$, $p < .025$). The mean rating for subjects teaching white students was 4.08, while the rating for teachers with a black student was 3.88, where 1=very displeased and 6=very pleased. (All means are displayed in Table 1.)

Judgments of the black teachers by the white raters showed no significant differentiation according to the race of the confederate, on the other
hand. The planned comparison contrasting ratings of black teachers praising a white student with black teachers praising a black student yielded a non-
significant result ($F=1.44, p > .20$). There was little judged difference
between blacks who were teaching a white ($M=4.27$) or a black ($M=4.18$)
confederate.

In summary, then, the ratings by the white judges supported the hy-
pothesis of differential nonverbal behavior for at least the white teachers. 
White teachers were judged to be more nonverbally pleased with their white
students than black students. However, no difference could be discerned
by the white judges between the black teachers teaching a white student
versus black student.

**Black judges' ratings.** Analysis of the black judges' ratings revealed
a contrasting pattern of results. Black judges did not distinguish a dif-
ference between white teachers teaching a white student compared with white
teachers teaching a black; the planned comparison was not significant
($F=1.58, p > .20$). White teachers teaching a white student were given a
mean rating of 4.12, while white subjects teaching a black were given a mean
rating of 3.99.

In contrast, black judges reliably distinguished among black subjects:
teaching white versus black students. The black teachers who were teaching
black students were judged as being significantly more pleased with their
students ($M=4.64$) than were the black subjects teaching a white student
($M=4.38; F=4.60, p < .05$).

Overall, it appears that the hypothesis of differential nonverbal be-
havior according to the racial composition of a teacher-student dyad was sup-
ported, at least when looking at the judgments made by raters of the same race
as the subjects in question. White judges rated white teachers as being more
pleased nonverbally with white than black students; black judges rated black
teachers as showing more pleasure with black than white students. Neither white nor black judges could distinguish reliably nonverbal behavior differences in teachers of a race other than their own.

**Discussion**

Ignoring, for a moment, the inability of both whites and blacks to decode other-race nonverbal behavior, it does appear that individuals display differential nonverbal behavior according to the race of the person with whom they are interacting. Even when being verbally positive and reinforcing their very successful student, the white and black teachers were judged (by same-race raters) as being more pleased when their student was a member of their own race than when the student was a representative of the other race.

Although the data appear to support the original hypothesis of the study, there are a number of alternative explanations for the locus of causality of the results. It is possible that the difference in nonverbal behavior between same- and different-race students simply may be due to expressions of anxiety. The teachers may have been more anxious when teaching a child of a different race, and this anxiety may have resulted in nonverbal behavior that was interpreted by the judges as displeasure.

Our favored explanation, however, rests on the assumption that the subjects held differential attitudes toward same- and cross-race persons. The mere presence of an individual may presumably evoke nonverbal behavior in an interactant that is representative of the attitude held toward that individual. If such is the case, then the subjects' nonverbal behavior may have been a reflection of the differential attitudes. Still, there is little evidence from the study to support either hypothesis, and the underlying explanation for the present findings remain unclear.
The inability of the judges in the present study to detect differences in nonverbal behavior of cross-race subjects is intriguing. It is possible that this lack of differentiation reflects an encoding difference between whites and blacks; whites and blacks may behave nonverbally in distinct ways. Equally plausible is the possibility that the lack of differentiation in other-race judgments is a function of the decoding process. The judges may use a different set of judgment criteria when making inferences about same- and other-race individuals. Finally, both encoding and decoding processes may vary. This particular controversy may be resolved through an objective analysis, by trained coders, of the actual nonverbal behaviors engaged in by the subjects. (Such an analysis is currently underway.)

It should be noted that the results of the study provide a rather robust demonstration of the phenomenon of differential nonverbal behavior due to the racial composition of the teacher-student dyad. Because of the procedure employed, the verbal behavior of the subjects was held quite constant across all conditions, thus allowing differences in nonverbal behavior to be interpreted unequivocally. It is also important to note that the nature of the situation and the concomitant verbal behavior were of a highly positive nature. Subjects were providing verbal reinforcement to a successful student that they were teaching. The confirmation of the hypothesis under these circumstances provides strong evidence for the existence of differential nonverbal behavior in dyadic interactions.

Results of the study seem to suggest some potentially crucial factors operating in the classroom that deserve further attention. If, for instance, students are aware of differential nonverbal behavior accorded to white and
black students by teachers, it is likely that this will have an influence on the learning process. Likewise, it is possible that feelings of confusion may result if, for example, a black student finds his white teacher being verbally reinforcing but displaying relatively negative nonverbal facial expressions. Further research into the effects of differential nonverbal behavior would seem critical.


Mehrabian, A. Some referents and measures of nonverbal behavior. Behavior Research Methods and Instrumentation, 1969, 1, 203-207.


Table 1
Results from Judges' Ratings of Teacher Nonverbal Behavior

**White judges' data (n=12)**

<table>
<thead>
<tr>
<th>Race of Teacher</th>
<th>Race of Student</th>
<th>Test of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>White</td>
<td>4.08</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>3.88</td>
</tr>
<tr>
<td>Black</td>
<td>White</td>
<td>4.27</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>4.18</td>
</tr>
</tbody>
</table>

Test of Difference: 8.32, p < .025

Higher numbers indicate higher ratings of how pleased the teacher appeared to be with her student.

**Black judges' data (n=20)**

<table>
<thead>
<tr>
<th>Race of Teacher</th>
<th>Race of Student</th>
<th>Test of Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>White</td>
<td>4.82</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>3.99</td>
</tr>
<tr>
<td>Black</td>
<td>White</td>
<td>4.38</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>4.60</td>
</tr>
</tbody>
</table>

Test of Difference: 1.58, n.s.; 4.60, p < .05

Higher numbers indicate higher ratings of how pleased the teacher appeared to be with her student.