Previous research has shown that both vocal and visual cues are utilized in stereotyping and that teachers' stereotypes of students' ethnic and social class backgrounds affect both their expectations and evaluations of them. This study offers evidence toward the following questions: (1) do teachers evaluate students differently according to mode of presentation, students' ethnicity, and social class? and (2) what is the relative influence of aural and visual cues upon teachers' evaluations? Videotapes of Grade 5 and 6 Anglo, Negro, and Chicano middle and lower class students were presented to 156 teachers who rated the students on 15 semantic differential scales. A 3 x 3 x 2 analysis of variance for repeated measures revealed significant effects for all 15 scales. Anglos were rated most positively, followed by blacks; Chicanos were rated least favorably. Middle class Anglos and blacks were rated more favorably than lower class Anglos and blacks, respectively; however, class made no difference in the ratings for Chicanos. The aural mode of presentation transmitted more cues than the visual mode.

(Authors/RJ)

THE INFLUENCE OF MODE OF PRESENTATION, ETHNICITY, AND SOCIAL CLASS ON TEACHERS' EVALUATIONS OF STUDENTS

Mary Jensen
Dalhousie University
Canada

Lawrence B. Rosenfeld
University of New Mexico

Please address correspondence to:
Lawrence B. Rosenfeld
Department of Speech Communication
University of New Mexico
1801 Roma, N.E.
Albuquerque, New Mexico 87131
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and
Lawrence B. Rosenfeld

ABSTRACT

Previous research has shown that both vocal and visual cues are utilized in stereotyping and that teachers' stereotypes of students' ethnic and social class backgrounds affect both their expectations and evaluations of them. This study offered evidence toward the following questions: (1) Do teachers evaluate students differently according to mode of presentation, students' ethnicity and social class? (2) What is the relative influence of audio and visual cues upon teachers' evaluations?

Videotapes of 5th and 6th grade Anglo, Black, and Chicano middle and lower class students were presented to 156 teachers who rated the students on 15 semantic differential scales. A 3 x 3 x 2 analysis of variance for repeated measures revealed significant F tests for all fifteen scales. Anglos were rated most positively, followed by Blacks. Chicanos were rated least favorably. Middle class Anglos and Blacks were rated more favorably than lower class Anglos and Blacks respectively; however, class made no difference in the ratings for Chicanos. The audio mode of presentation transmitted more cues than the visual mode.
THE INFLUENCE OF MODE OF PRESENTATION, ETHNICITY, AND SOCIAL CLASS ON TEACHERS' EVALUATIONS OF STUDENTS*

August 10, 1973

It is commonly thought that education is one of the most powerful determinants of economic position in American society. An increasing amount of education is believed to make possible a wider array of job and career opportunities. Thus, it is of concern that students from different minority and ethnic group backgrounds do not fare equally well in our public schools. The aim of this study was to investigate the possible influence of ethnic and social class stereotyping on teachers' judgments of students, as well as how these stereotypes might be transmitted.

Rosenthal and Jacobson (1968) touched off a great deal of research on expectancy effects with the publication of their controversial book, Pygmalion in the Classroom. Their underlying thesis was that teachers, by virtue of their expectations for student performance, elicit student behavior which conforms to their expectations, i.e., students will behave in a manner consistent with teachers' expectations for

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*The project presented or reported herein was performed pursuant to a grant from the National Institute of Education, Department of Health, Education, and Welfare, (NIE Grant NE-G-00-3-0039). However, the opinions expressed herei do not necessarily reflect the position or policy of the National Institute of Education. No official endorsement by the National Institute of Education should be inferred.
their behavior—an instance of the self-fulfilling prophecy. In their research, Rosenthal and Jacobson manipulated teachers' expectations by providing teachers with information concerning students' capabilities for academic achievement. However, in many classrooms, initial expectations for students' classroom behavior may be the result of social stereotypes. These stereotypes suggest that students belonging to certain ethnic and lower social classes are less well equipped and less interested in school achievement than their middle class Anglo peers. Blacks and Chicanos are two ethnic groups characterized by unfavorable stereotypes (Secord, 1958; Hurt and Weaver, 1972). If stereotypes do influence teachers' expectations for student achievement and classroom behavior, then it follows that teachers will devalue Black and Chicano students in line with their ethnic stereotypes. A number of studies offer support for this idea. (Woodworth and Salzer, 1971; Whitehead and Miller, 1972; Williams, Whitehead and Miller, 1971). Social class, like ethnicity, is another variable which can serve as the basis for stereotyping, and numerous investigations have documented the negative stereotypes which portray lower class students (Decker, 1952; Sewell, Haller and Strauss, 1957; Sexton, 1961; Rosen, 1969; Miller, 1973).

Since students rarely wear labels identifying their ethnic and social class backgrounds, there has been considerable interest in determining how these cues are communicated to teachers. Secord (1958), Clifford and Walster (1973), and Williams, Whitehead and Miller (1971) offer evidence supporting
the idea that ethnic and social class cues can be transmitted visually. However, considerable evidence has accumulated indicating that both ethnic and social class cues also are carried paralinguistically (through the non-verbal, vocal properties of speech) (Buck, 1968; Anisfeld, Bogo and Lambert, 1962; Naremore, 1971; Williams and Naremore, 1971). The relative importance of audio and visual cues for eliciting stereotypes is unknown.

METHODOLOGY

The present study investigated the effects of mode of presentation, ethnicity, and social class on teachers' judgments of students. Teachers saw, heard, and both saw and heard videotapes of students of different ethnic and social class backgrounds, then rated the students on 15 semantic differentials dealing with classroom evaluative criteria. Figure 1 shows the design of the study.

Insert Figure 1 about here

Subjects

Twelve junior high and four senior high schools were randomly selected from a list of schools in the Albuquerque Public School system. One hundred sixty-eight teachers from these schools either volunteered or were chosen by their principals to participate in the study, since school administrators would not allow a random selection of teacher subjects.
Experimental conditions were randomly assigned to schools on the basis of number of participating teachers; some schools were assigned more than one experimental condition. In order to have equal n's for the analysis, the responses of 12 subjects were randomly discarded, leaving a total of 156 subjects. Of these, 49 were male; 107 were female. One hundred thirty-one of the teachers were Anglo, 13 were Chicano, 6 listed "Other" as their ethnic membership (excluding Anglo, Black, Chicano, and Indian), and 6 did not respond to the question. The teachers' average age was in the response category of 30-39 years and the average number of years of teaching experience was 9.08. Eighty-five of the teachers held at least a bachelor's degree, while 66 held at least a master's degree; 3 had no college degree, and 2 had Ph.D.'s.

Measuring Instruments

During May 1972, a mail questionnaire was sent out to a randomly selected group of Albuquerque Public School teachers. Thirty-seven per cent of the teachers responded, giving lists of the evaluative criteria they used to judge students in the classroom. These lists contained both social and academic criteria. Since most of the concepts were highly evaluative in nature, the semantic differential was selected as the questionnaire format to be used in this study (Darnell, 1970). Gardner, Wonnacott, and Taylor (1968) comment on the appropriateness of the semantic differential for stereotype research as follows. "This technique provides an index of community-wide stereotypes as well as an individual difference
measure of the extent to which such traits are attributed to the ethnic group [p. 35]." In addition, semantic differentiation bypasses objections raised to traditional stereotype research by providing the subject with an opportunity to evaluate stimuli at either the stereotypic or non-stereotypic end of the continuum.

Concepts for the 15 semantic differential scales were chosen from lists generated by public school teachers. The most frequently occurring concepts were submitted to a separate group of public school teachers, who judged them for their relevance to the classroom. The 15 concepts which resulted from this process, and their format, are given in Figure 2. For the final instrument, six different forms of these 15 concepts were prepared (one form for each of six students appearing on each videotape). On each form, both the polarity and the order of the scales were randomized to reduce order effects. Finally the order of the forms themselves was randomized.

Because of the evaluative nature of the concepts generated, it was believed that social desirability might influence teachers' responses to the students. As a check for this possibility, the Crowne-Marlowe Social Desirability Scale (1964) was included as an additional dependent measure in the study.
Stimulus Materials

The videotapes used in the study were copied from those used by Williams in previous studies (Williams, Whitehead and Miller, 1971). Fifth and sixth grade boys representing Anglo, Black, and Chicano ethnic groups and middle and lower social classes were filmed in interview situations in which the boys were asked to discuss their favorite television shows and games. Each of the ethnic x social class conditions was represented on each of the three tapes used in the study. Thus, 18 different boys (6 on each tape) served as stimulus material. Each boy was individually interviewed by an Anglo female in her mid-twenties and the tapes contained edited portions of these interviews which were approximately two minutes in duration. All of the boys were neatly dressed, most of them in slacks and sport shirts. All of the boys were selected from schools in or near Austin, Texas; therefore, their speech reflects regional variations typical of that area.

RESULTS

A 3 x 3 x 2 design was analyzed using an analysis of variance for repeated measures (Games, 1972). A probability level of .01 was selected as the basis for determining significant differences in the analysis of variance, and in the subsequent Neuman-Keuls multiple comparison procedure which was used as the follow-up to pinpoint the specific cells involved in the effects found. Triple interactions were
obtained on 7 of the 15 scales, indicating that on these 7 scales, teachers judgments of students were a function of all of the independent variables. These seven scales were Scale 1: Participation, Scale 2: Attitude, Scale 5: Test Performance, Scale 6: Motivation, Scale 9: Intelligence, Scale 14: Self Concept, and Scale 15: Neatness.

Double interactions were obtained on six scales. A Mode x Ethnicity interaction was found on Scale 3: Effort, Scale 4: Attendance, and Scale 13: Creativity.

A Mode x Class interaction was obtained on Scale 8: Works Independently.

An Ethnicity x Class interaction was found on Scale 4: Attendance, Scale 8: Works Independently, Scale 10: Follows Directions, Scale 11: Responsibility, and Scale 13: Creativity.

Main effects were obtained for three scales. Main effects for Ethnicity were found for Scale 7: Cooperation, and Scale 12: Courtesy.

A main effect for Class was found on Scale 3: Effort.

A visual inspection of the graphed cell means revealed consistencies in the data for each of the interactions obtained. The discussion which follows is based upon patterns which were consistent across scales for each of the significant effects obtained. For a complete analysis of the findings, including the F tables and the results of the Neuman-Keuls procedure, see Jensen (1973).

Main Effects

Two main effects for Ethnicity were obtained (Figure 3).
The graphed data indicated that Anglo students were evaluated more favorably than Black students, and that Black students were evaluated more favorably than Chicanos. (Note that 1 = most favorable rating; 7 = least favorable rating). Comparison of cell means indicates that for both scales, Anglos were rated significantly higher than Chicanos, and were rated significantly higher than Blacks on Scale 7: Cooperation.

Insert Figure 3 about here

A main effect for Social Class was found on Scale 3: Effort (Figure 4). Middle class students were rated significantly higher than lower class students on effort.

Insert Figure 4 about here

Double Interactions

Mode x Ethnicity interactions were obtained on three scales (Figure 5). The patterns in the graphed data indicate that Anglos are rated highest in the audio mode, while Blacks and Chicanos generally are rated most favorably in the visual mode. Mode of presentation seemed to affect ratings for Black students more than ratings for Anglo or Chicano students, with Blacks in the audio mode being rated significantly lower than Anglo students in all three conditions for all three scales. On scales 4 (Attendance) and 13 (Creativity), Black students in the visual condition were rated significantly
higher than Black students in the audio condition. Chicanos, except as already mentioned, were not rated significantly differently than Blacks.

A Mode x Class interaction was obtained on Scale 8: Works Independently. Figure 6 shows that, except in the visual mode, middle class students were evaluated more favorably than lower class students. However, only the difference in the audio-visual condition was statistically significant.

Ethnicity x Class interactions were obtained for five scales. Figure 7 shows that teacher evaluations for Anglo and Black students decreased as social class decreased. Evaluations for Chicanos did not seem to reflect this trend. Chicano middle and lower class students and Black lower class students were rated similarly at the lowest end of the scale (i.e., did not differ significantly from each other) while Anglo middle class students always received the most favorable ratings.
Triple Interactions

Triple interactions were obtained on six scales. The data for all scales except Scale 15 (Neatness) share patterns. Therefore, what follows is a discussion of the patterns for Scales 1 (Participation), 2 (Attitude), 5 (Test Performance), 6 (Motivation), and 14 (Self Concept). Scale 15 (Neatness) is discussed separately at the end of this section.

In general, the triple interactions show patterns which are consistent with those obtained with the double interactions (Figure 8). Anglo middle class students in the audio and audio-visual conditions were rated more favorably than students in nearly every other set of conditions. Lower class Anglo students were rated generally more favorably than both middle and lower class Chicanos and lower class Blacks in all modes (except in the audio-visual mode on Scale 9). Black middle class students fared better in the visual modes (visual and audio-visual) than in the audio mode, while mode of presentation seemed to make little difference for Black lower class students. Regardless of mode of presentation and class, Chicanos were represented in the bottom half of the ratings on every scale. With only one exception (Visual Chicano Middle Class on Scale 9), none of the differences for Chicanos were statistically different. Except in the audio mode, Black middle class students were evaluated more favorably than Black lower class students.

Insert Figure 8 about here
For scales 5 (Test Performance), 6 (Motivation), and 9 (Intelligence), there was a narrower range of scores in the visual condition. For scales 1 (Participation), 7 (Attitude), and 14 (Self Concept), there was an approximately equal range of ratings from one mode of presentation to another.

Scale 15 (Neatness) did not share patterns with other scales (Figure 9). Mode of presentation had the most obvious effect on this scale as students in the visual condition were rated approximately the same (at the favorable end of the continuum). Audio cues and audio-visual cues elicited a wider range of ratings than visual cues alone.

Insert Figure 9 about here

Social Desirability

Teachers' responses to the Crowne-Marlow Social Desirability Scale showed that, as a group, teachers in this study have less of a tendency to respond in a socially desirable manner ($\bar{X} = 14.25$, s.d. = 5.79) than those in the normative group ($\bar{X} = 15.99$, s.d. = 5.54; $t = 3.63$, df = 1573, $p < .001$). The notion that teachers' responses were significantly related to the tendency to respond in a socially desirable manner was not verified.
DISCUSSION

Main Effects

Three scales showed main effects—two for Ethnicity and one for Social Class. In the main effect for Ethnicity, the order of the means was always the same: Anglos were rated better than Blacks; Blacks were rated better than Chicanos.

There are a number of possible explanations for Anglos being rated most favorably. Cooper (1972) has shown that one’s own ethnic group is evaluated more favorably than other ethnic groups. Since roughly 84 percent of the sample were Anglo, the finding may be due to ethnocentrism.

A more plausible explanation is that the ratings were a function of social stereotypes. The mere perception of a student as a Black or Chicano might have been enough to have elicited a categorical response to him. In ethnocentrism, Anglos are rated more favorably because the perceiver is an Anglo. However, the fact that ratings for Blacks and Chicanos varied, lends support to the notion that the ratings were indeed based upon a categorical response, for if ratings were due only to ethnocentrism, we would expect Anglos to be rated higher, but would not expect a difference in the evaluations of Blacks and Chicanos.

The proportional size of a minority group may also affect beliefs about that group. As the size of a minority group increases, its threat to the social and economic
dominance of the majority group increases. In Albuquerque, Chicanos comprise a considerably larger proportion of the population than do Blacks; according to this theory, we would expect Chicanos to be rated lower on the scales than Blacks, and they were.

Although three explanations have been offered for the effects obtained concerning ethnicity, it is assumed that ethnocentrism played a minimal role in producing the results because Blacks and Chicanos were differentiated. Thus, stereotyping and the social dominance theory appear to be the most viable explanations for the results obtained.

A main effect for Class was also obtained. Middle class students were rated more favorably than Lower Class students. These findings are consistent with stereotypes of the poor as lazy and not caring about getting ahead (Becker, 1952; Davis, 1972), and with results of earlier studies dealing with the evaluation of middle and lower class speakers from vocal cues (Naremore, 1971; Williams, Whitehead, and Traupman, 1971; Harms, 1961; Moe, 1971).

Double Interactions

All three types of double interactions were represented on the scales. In the Mode x Ethnicity interaction, Anglos received their highest ratings in the audio mode, while Blacks received their highest ratings in the visual mode and their lowest ratings in the audio mode. Chicanos tended to be evaluated lower than either Anglos or Blacks and there was little variation in their ratings according
The tendency for Anglos to be evaluated more positively than Blacks or Chicanos has already been discussed. Concerning mode of presentation, it may be that vocal cues are the most salient cues for making judgments on the dimensions of effort, attendance and creativity. Once a teacher has identified a student as Anglo, he may categorically be assumed superior to Blacks and Chicanos on these dimensions. The fact that Blacks received their worst ratings in this mode of presentation supports the idea that speakers of dialectical speech are devalued compared with speakers of standard English. On the other hand, Chicanos received low evaluations regardless of their mode of presentation. Perhaps this is a reflection of the social dominance theory already discussed, i.e., the size of the Chicano population enhances the negative stereotypes already held for that ethnic group.

In the Mode x Class interactions, a smaller range of ratings was obtained in the visual condition. One reason for this may be that fewer social class cues are transmitted visually than via the paralinguistic properties of speech. This finding is consistent with Buckingham's (1972) conclusion that the audio channel contains more information than the visual channel. The widest range of ratings was obtained in the audio-visual mode which suggests that, with both types of cues, teachers are better able to discriminate between different social classes.

In the Ethnicity x Class interactions, Anglos and
Blacks received better ratings in the Middle Class condition than in the Lower Class condition. On one scale (Creativity), the class variable for Black Middle Class students overcame the advantage Anglo Lower Class students had due to their ethnicity, and although the difference was not statistically significant, the point is worth noting. Black Lower Class students were evaluated considerably lower than Black Middle Class students, and tended to be rated similarly to Chicanos of both classes, who, once again, were rated lowest on the scales. There were no significant differences in ratings for Middle and Lower class Chicanos. The findings for the Ethnicity x Class interaction suggest that, for Anglos and Blacks, class is a more salient dimension for stereotyping than is ethnicity. However, for Chicanos, ethnicity seems to override all other considerations.

A combination of the social dominance theory and stereotyping has already been offered as an explanation for the low evaluations received by Chicano students. Another possible explanation may come from socialization theory and the nature of the civil rights movement. Although more recently Blacks have emphasized their ethnic identity (Black is beautiful!), earlier efforts to reduce discrimination toward Blacks contained appeals to Anglo middle Class society based upon shared life styles and values--factors associated more with class than with ethnicity. Teacher subjects may have been socialized into stereotypes influenced by the earlier Black social movement. Since the Chicano movement is more
recent and its emphasis has been primarily based upon ethnic identity, we would not expect class considerations to be as important for evaluating Chicanos.

**Triple Interactions**

In general, the patterns obtained with the triple interactions were consistent with those obtained on the double interactions. While audio cues help establish both ethnicity and class, visual cues seem to be more useful in transmitting ethnic cues than class cues. The narrower range of scores on three of the scales for the visual condition tends to confirm that either less information is available in that mode or that teachers tend not to rely on visual cues as much when evaluating students of different ethnic and social class backgrounds.

The data for Scale 15 (Neatness) did not share patterns with the other scales. For this scale, mode of presentation seemed to influence the ratings most. Students in the visual conditions tended to receive higher ratings than students in the audio condition. In the visual-only condition, students received similarly positive ratings, probably because a large component of neatness in this mode was based upon a visual spatial judgment and all students were neatly dressed for the interviews. However, the addition of audio cues in the audio-visual mode produced a much larger range in the ratings, suggesting that other components of neatness were entering into the teachers' evaluations, perhaps, language precision, or course, logical thought. The ratings for the
audio only mode also suggest that teachers might have been using different aspects of neatness to make their judgments. Stereotyping then, probably has more influence in situations that are less concretely judged. In this instance, there was little stereotyping evident for neatness when teachers were given objective visual evidence upon which to make their judgments. However, when a greater amount of subjectivity was involved, teachers differentiated much more among students and in a manner similar (though not identical) to other scales.

CONCLUSIONS

1. Anglo students are evaluated more favorably than Black or Chicano students. Chicano students are evaluated least favorably.

2. For Anglo and Black students, class is a salient dimension in teacher evaluations. However, for Chicano students, class has little influence on teachers' ratings, and ethnicity seems to be most relevant to teachers' evaluations.

3. The audio channel contains more information for making classroom judgments than does the visual channel.

4. For Anglo Middle Class students, evaluations are more positive when these students are vocal; for Anglo Lower Class students, evaluations are more positive in nonvocal situations. Black students are rated more favorably in visual and audio-visual conditions than in the audio only situation. Regardless of vocal or visual cues, Chicanos are
evaluated at the low end of the scale in comparison to Anglo and Black students.

5. Judgments of students are based rarely upon single dimensions. Rather, stereotyping seems to be influenced by a number of considerations, including ethnicity and class. How cues for these two dimensions are received by the teacher (via audio, visual or audio-visual channels) affects the importance attached to them.


Naremore, R. C. Teacher's judgments of children's speech:


Williams, F., Whitehead, J. L., & Miller, L. Attitudinal correlates of children's speech characteristics. Final report, Project No. 0-0336, Grant No. OEG-0-70-7868(508), Center for Communication Research, University of Texas, March 1971.

**Social Class**

**Middle**

<table>
<thead>
<tr>
<th>A*</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio</td>
<td>52**</td>
<td>-</td>
</tr>
<tr>
<td>Visual</td>
<td>52</td>
<td>-</td>
</tr>
<tr>
<td>Audio-Visual</td>
<td>52</td>
<td>-</td>
</tr>
</tbody>
</table>

* A = Anglo
B = Black
C = Chicano

**52 subjects responded to both middle and lower class Anglo, Black, and Chicano students, in each of the three presentation modes.**

**FIGURE 1**

**DESIGN**
THIS STUDENT PROBABLY. . .

participates in class __:__:__:__:__:__ does not participate in class

has a good attitude __:__:__:__:__:__ has a poor attitude

exerts no effort __:__:__:__:__:__ exerts a great deal of effort

attends regularly __:__:__:__:__:__ is frequently absent

performs well on tests __:__:__:__:__:__ performs poorly on tests

lacks motivation __:__:__:__:__:__ is highly motivated

is cooperative __:__:__:__:__:__ is not cooperative

works well independently __:__:__:__:__:__ does not work well independently

is not intelligent __:__:__:__:__:__ is very intelligent

does not follow directions __:__:__:__:__:__ follows directions

is irresponsible __:__:__:__:__:__ is responsible

is courteous __:__:__:__:__:__ is not courteous

is very creative __:__:__:__:__:__ lacks creativity

has a poor self concept __:__:__:__:__:__ has a good self concept

is sloppy __:__:__:__:__:__ is neat

FIGURE 2

FORMAT OF SEMANTIC DIFFERENTIAL SCALES
FIGURE 3

MAIN EFFECTS: ETHNICITY
Scale 3: Effort

FIGURE 4

MAIN EFFECT: CLASS
Scale 8: Works Independently

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4.0
4.1

AU V AuV

FIGURE 6

MODE x CLASS INTERACTION
Scale 4: Attendance

Scale 8: Works Independently

FIGURE 7

ETHNICITY x CLASS INTERACTIONS
FIGURE 8

TRIPLE INTERACTIONS
FIGURE 8 (continued)

TRIPLE INTERACTIONS
Scale 9: Intelligence

1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4.0
4.1
4.2
4.3
4.4
4.5

Scale 14: Self Concept

1.9
2.0
2.1
2.2
2.3
2.4
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
4.0
4.1
4.2
4.3
4.4
4.5

FIGURE 8 (continued)

TRIPLE INTERACTIONS
FIGURE 9
TRIPLE INTERACTION