The hypothesis of this study was that scholastic achievement of the low achieving student has positive correlations with his ability to identify with his teacher. Two hundred and sixty-five eighth grade students, 40 percent black, viewed and heard one of two versions of a tape-slide presentation, one with a black narrator teacher and one with a white narrator teacher. The black teacher spoke in a Negro dialect, and the white teacher spoke in a standard or general American dialect. Three tests were administered to measure: (1) concept acceptance, persuasiveness, and source credibility; (2) retention of information; and, (3) racial identity (unrelated to content of presentation). Statistical data were inconclusive. Although black and white students clearly identified with their respective racial groups, the difference in reference groups have no significant effect on interaction between race of subjects and perceived race of narrator when retention, attitude toward content of narration, or source credibility were the criteria. [Not available in hard copy due to marginal legibility of original document.] (KG)
If no man is an island, as John Donne has stated so eloquently, then every man is influenced by his associates, the members of his group. The plural "groups" would be more accurate since each of us belongs to many groups, some of which influence our attitudes, shape our personality, structure our behavior, and even affect our cognitive processes.

RATIONALE

Reference group theory, broadly interpreted to include the concepts of identification and cohesiveness, has provided the theoretical framework for the research in this study. Specifically, the investigation attempted to examine the relationship between membership in a reference group and selective cognitive processes. Certain relationships between group membership and attitude were also explored.

This study investigated varying effects which membership in a racial group has on children, both black and white, attending public schools.

Some scholars believe that a positive relationship exists between the scholastic achievement of a student and the degree to which he is able to identify with his teacher. Those who refuse to identify or who become alienated by their teachers do poorly. Thus, poor achievement in the schools, especially among Negro children, may
be due, in part to the inability or the unwillingness of some children to identify with teachers of a different race. High achieving students may find it easier to identify with a teacher of a different race or these students may be so highly motivated that the racial similarity or dissimilarity of the teacher is an unimportant factor.

With the increasing utilization of instructional technology, a second teacher-student identity pattern must also be considered, the identity of the narrator or teacher who disseminates the mediated instruction.

When a Negro Child views educational films or instructional television or hears instructional records and tapes, the voices he hears and the faces he sees are predominately those of white teachers, actors, or narrators. Black actors or teachers have been used with increasing frequency on instructional television but most educational films are still lily-white.

HYPOTHESES

This research investigated the racial aspect of teacher-student identification and the effect which this identification has on simple retention and attitude formation among students. The study tested differences in learning and differences in attitudes toward the narrator and the subject matter he teaches when children (white and Negro) view and hear a tape-slide presentation and perceive the narrator-teacher to be a member of their own or a different ethnic group.

Three specific hypotheses were tested. These included:

1. Children who perceive an instructional tape narrator to be a member of their own race will score significantly higher on a retention test than will children who perceive the narrator to be a member of a different race.
2. Children who perceive the narrator to be a member of their own race will rate that narrator significantly higher on the various dimensions of source credibility and will also rate as more acceptable the content the narrator discusses than will subjects who perceive the narrator to be of a different race.

3. The effects anticipated in the first two hypotheses will be greatest among students who are low achievers and least among students who are high achievers. The implication of this hypothesis should be explained further. The investigator is hypothesizing that one's racial group is a more important reference group for low achievers than for high achievers. As the importance of the reference group declines, the differences associated with the race of the narrator will diminish.

These three hypotheses were based on the postulate that members of a racial group do identify with others of their own race. The study developed and utilized a measurement of racial identification to test this key assumption.

Relationships between achievement and attitude which occurred independently of race of subject and race of narrator were also explored.

**METHOD**

Eighth grade students from two public junior high schools, one in Des Moines, Iowa and one in Argo, Illinois (a south Chicago district), served as subjects for the experimental phase of the study. About forty percent of these students were Negro; the balance were white. Twelve intact classes of eighth graders were involved in the study and the total sample included 256 subjects. All of the subjects
were exposed to a fourteen-minute instructional sound-slide presentation about African Bushmen. The students viewed the sound-slide stimulus in their normal classroom environment. Upon completion of the instructional tape, subjects were given three successive tests.

The first test consisted of six semantic differential-type attitude measures. These were designed to measure concept acceptance (the relative acceptance by students of the subject matter presented in the stimulus), persuasiveness (the extent of student agreement with statements of opinion made by the stimulus narrator), and four dimensions of source credibility (trustworthiness, dynamism, competence, and pleasantness). The second test consisted of twenty multiple choice questions and was designed to measure the subjects' retention of information contained in the stimulus.

The third instrument was unrelated to the sound-slide stimulus. This racial identification test attempted to obtain a measurement of racial identity—to ascertain that the subjects do identify their own racial group. This unique test was constructed by categorizing well-known sports, entertainment, and political celebrities into fifteen classifications. Nine of the fifteen classifications included three white celebrities and one Negro celebrity. Six dummy questions, each with four whites and no Negroes as possible choices, were interspersed with the racial-choice questions to mask the intent of the test.

Two versions or treatments of the sound-slide stimulus were prepared for the experiment. In the first version, the narrator spoke in a standard General American dialect, and three pictures of a white man, supposedly the narrator, were interspersed among the content slides to firmly establish that the narrator was Caucasian. In the second version, the narrator used a Negro dialect.
and three pictures of a black man were integrated among the content slides to establish both audibly and visually that the narrator was Negro. In actuality, the same person was utilized for both audio narrations, thereby eliminating the variable of personality which would have been confounded with ethnic voice were two different narrators employed.

Approximately one-half of the 256 subjects (six of the twelve classes) were exposed to the "white" version of the sound-slide stimulus. The remaining subjects were exposed to the "black" version. Both groups of subjects took the attitude, retention, and racial identification tests immediately after the sound-slide presentation.

A three-dimensional analysis of variance design was utilized to statistically analyze the eight criterion measures—the six attitude scales, the retention test, and the racial identification test. Race of the subjects, achievement level of the subjects, and presumed race of the narrator (the treatment effect) were the three sources of variance in the analysis. Tests of both three-way and two-way interaction were made as well as tests of main effects.

Measurements from the Des Moines and Arizona student samples were analyzed separately rather than pooled because each group of subjects represented a separate and distinct population.

RESULTS

Using reference group theory as the theoretical base for the study, I hypothesized that a race by treatment interaction would occur for all six of the attitude measurements and also for the retention test. If racial similarity or dissimilarity between the sender and the receiver of a message affects the acquisition of knowledge and the formation of attitudes, then subjects should
learn more from and also rate more favorably a narrator from their
own racial group. Conversely, subjects should learn less from and
rate less favorably a narrator from a different racial group.

I hypothesized further that the intensity of the race-
treatment interaction would vary with the achievement level of the
subjects; i.e., the race-narrator interaction would be greater for
low achieving members of both racial groups and less for high achieving
members of both groups.

No triple interaction (race by treatment by achievement
level) was significant in any of the analyses performed. Only
one race by treatment interaction was significant in the direction
predicted by the hypotheses. This interaction involved the
trustworthiness dimension of the source credibility scales for the Argo
subjects. Then mean scores for the four race and treatment combinations
(white subject-white narrator, white subject-black narrator, black
subject-white narrator, and black subject-black narrator) were examined
(disregarding tests of statistical significance), the hypothesized
trend was evident in the Argo sample for five of the six attitude
scores—persuasiveness, trustworthiness, dynamism, competence, and
pleasantness—and for retention. A similar examination of mean scores
for the Des Moines sample revealed a trend in the opposite direction
for retention and for all but one (dynamism) of the six attitude scales.
Des Moines students, both white and Negro, seemed to be making a
special effort to demonstrate their lack of racial prejudice by
giving higher attitudinal ratings to the narrator from a racial
group different than their own.

The racial identification scores revealed another difference
between the Des Moines and the Argo students. Black students from
schools both had almost identical mean scores of 6.57 and 6.50 but Des Moines
whites chose more Negro celebrities (2.79) than Argo white students (1.63). The principal and two teachers in the Des Moines school were Negro while all of the Argo faculty were white, but it is impossible to determine what effect this difference had on either the racial identification scores or the difference in the patterns of race-treatment interaction.

When the three main effects of the analyses—race, treatment, and achievement—were examined separately, no significant differences in retention or any of the six attitude scales could be attributed to the race and treatment factors. A pattern of significant differences was found among achievement levels, however. As expected, high achieving students performed best on the retention test, followed by middle and then by low achievers. These findings were corroborated by correlation techniques which yielded a significant (.55) correlation between the achievement and retention scores. More surprisingly, high achieving students rated the narrator higher on the six attitude scales than middle and low achieving students. Differences between high and middle achievers were not great generally, but differences between both of those groups and the group of low achievers formed a uniform pattern. Low achieving students consistently perceived the narrator less favorably than other students did.

DISCUSSION

Statistical data from the experiment were inconclusive. None of the three hypotheses stated earlier can be accepted on the basis of evidence from this study. Though the black students clearly identified more with Negroes than whites and whites identified more with whites, as the racial identification test showed, this difference in reference groups had no significant effect on interaction between race of subjects and perceived race of narrator when retention,
attitude toward content of narration, or source credibility were the criteria.

If we give full credence to the results of the analyses, we must conclude that black and white students learn equally well from mediated teachers (and perhaps from classroom teachers) of similar or dissimilar racial backgrounds. Obviously I am not willing to draw these conclusions from my own limited research. I have already expressed some misgivings about the representational quality of the sample subjects. Two other extraneous factors also may have influenced the research data.

The sound-slide stimulus and the measurement instruments were administered by myself rather than by the regular classroom teacher. This procedure assured a uniform presentation of the experiment but it also introduced the possibility of a laboratory or "Hawthorne" effect among the students.

Secondly, the sound-slide presentation may have been topic-bound. The suitability of the particular subject, the Bushman of South Africa, was given careful consideration because race is a key element in this study. It was concluded that no subject is truly neutral. Further, since the purpose of this research was the examination of certain cognitive and attitudinal differences which may be related to race, it was judged that a stimulus dealing with African Negroes might maximize these differences. At the same time, it was recognized that the selection of a "racially-bound" topic would limit the generalization of findings from this research to broad topics of varying subjects.

The Bushman topic might have maximized the identification process, but, on the other hand, it might have had the opposite effect on blacks who want to disassociate with these primitive Africans.
Because of my own predisposition to the social sciences I failed to consider the utilization of scientific or mathematical topics which, in retrospect, might have been more neutral in their effect on attitude.

Further experimentation with a larger and more carefully selected sample of students is now needed to examine in greater depth the effects of racial identification on the cognitive and affective processes. Future studies should also examine the variables which increase or decrease the degree of racial identification present among children as well as the variables which increase or decrease the effects of racial identification. Some of these variables might include the proportion of black and white students in a particular school, the demographic background of the neighborhood and the school, and the degree of past and present contact by students with teachers from the same and/or from a different racial group.
1. The terms identification and cohesiveness are so closely related that they will be used interchangeably in this paper. Identification is the process by which an individual equates himself with other persons who possess certain similarities. Cohesiveness refers to the tendency for a number of individuals who possess similarities to form and/or remain within a group.


5. Initially, the Des Moines and Argo subjects were pooled and a single analysis was performed. Inspection of the data indicated that the subjects represented two quite different populations. It therefore appeared that separate analyses for each sample would make possible a more meaningful interpretation of the data.