The study sought to determine the effect of cognitive knowledge on ethnic attitudes among inner city white high school students. One experimental and one control group, each comprising approximately 36 students, were designated for the study. Subjects were pretested, posttested, and delayed posttested one month after posttesting using both cognitive and attitudinal measures. Analysis of covariance and correlation were used to determine the effect of treatment between groups and the relationship between cognitive achievement and retention to attitude change. The findings indicate statistically significant cognitive-affective attitudinal change immediately after treatment but delayed posttesting indicated no change. The correlation between attitude change and cognitive achievement were generally significant at .05. The findings suggest that knowledge and attitudes are in constant interaction and that delayed posttesting should be seriously considered in future research. Finally, it is suggested that the component parts of an attitude should be considered in future research of this kind. (Author/SM)
Attitudinal Change in White Students after Instruction in an Ethnic Relations Unit

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ABSTRACT

The study sought to determine the effect of cognitive knowledge on ethnic attitudes among inner city white high school students. An experimental (N=34) and control group (N=33) were designated for the study. Subjects were pretested, posttested and delayed posttested one month after posttesting using both cognitive and attitudinal measures. Analysis of covariance and correlation were employed to determine the effect of the treatment between groups and the relationship between cognitive achievement and retention to attitude change.

The findings indicated statistically significant (.05) cognitive-affective attitudinal change immediately after treatment but delayed posttesting indicated no change. The correlation between attitude change and cognitive achievement were generally significant at .05.

The findings suggest that knowledge and attitudes are in constant interaction and that delayed posttesting should be seriously considered in future research. Finally, it is suggested that the component parts of an attitude should be considered in future research of this kind.
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Objectives of the Inquiry

The intent of the study was to determine whether or not cognitive information dealing with the nature of race, social class and caste, and prejudice would result in attitudinal changes among students in a predominantly white inner city school.

Three null hypotheses were set forth and measured at the .05 level of significance. The null hypotheses were as follows:

1. *There is no significant difference in attitudinal changes between students in the experimental group and control group after instruction.*

2. *There is no significant relationship between cognitive achievement and attitudinal changes among students in the experimental group.*

3. *There is no significant relationship between cognitive retention and attitudinal changes among students in the experimental group.*

Method

The study consisted of the following experimental design:
The same teacher was used in teaching the experimental and control groups. The control group received its usual instruction in history and the experimental group received the treatment.

The treatment consisted of instruction in the unit, *Race, Caste, and Prejudice* under the title of *Man and Myth: A Unit in Ethnic Relations*. The unit was designed by Marion J. Rice, Gilfrid C. Bailey and the researcher under the Anthropology Curriculum Project at the University of Georgia. A teacher manual-student guide, containing activities, glossary, and programmed instruction was also included in the treatment.

For the first null hypothesis, analysis of covariance was used to determine significant attitudinal differences between the experimental and control groups. The covariates employed were the pretreatment scores for each test and scale.

Difference scores from pretest and posttest cognitive tests and difference scores between pretreatment and posttreatment attitudinal scales were correlated to test...
the second null hypothesis. Difference scores of posttest and delayed posttest cognitive tests were correlated with difference scores of posttreatment and delayed posttreatment attitudinal scales in order to determine the relationship between cognitive retention and attitudinal changes.

**Data Sources**

The sample population consisted of high school juniors attending a predominantly white inner city school in St. Louis, Missouri. There were 34 students in the experimental group. Of these, 29 belonged to families in the lower middle to lower lower socioeconomic class levels. The control group consisted of 39 subjects; 31 of these students belonged to families in the lower middle to lower lower class levels.

Achievement was measured by an investigator designed cognitive test. The scales measuring attitudes consisted of an investigator designed cognitive-affective scale, Remmers's Attitude Toward Any Defined Group scale, and a modified social distance scale, the S.D. scale, developed by Rice and the researcher.

**The Results**

The findings indicated the following:
1. Following the treatment period, the experimental group showed significant cognitive and attitudinal changes as compared to the control group when measured by the cognitive test and cognitive-affective scale during posttreatment observations. Therefore, the first null hypothesis was rejected in this case.

2. No statistically significant difference between groups was found in terms of the Fenners's scale (attitudes toward Negroes) nor on the S.D. scale. However, the group means on both scales were more positive than pretreatment observation means. Nevertheless, the Ho was not rejected.

3. On delayed posttreatment observations the first null hypothesis failed to be rejected in every case. The cognitive achievement test mean dropped to between the means of pretreatment and posttreatment observations. The cognitive-affective delayed posttreatment observation mean fell to 3.72, which was the same mean score for the pretreatment cognitive-affective scale observation.

4. The second null hypothesis was not rejected at .05 in terms of the cognitive-affective scale although the correlation between pretreatment and posttreatment cognitive gains and attitudinal changes were positively correlated. Significantly positive correlations were
found for the S.D. scale and the Remmers's scale (toward Negroes). In terms of the latter two scales the $H_0$ was rejected.

5. The third null hypothesis was rejected on every count. (The data did not meet the requirements for correction for attenuation regarding the third or second null hypothesis.)

Educational Importance of the Study

The study suggests that cognitive knowledge influences ethnic attitudes. However, as newly acquired knowledge is forgotten, attitudinal changes begin to revert to their original level. Furthermore, the researcher concluded that cognitive achievement and retention are positively correlated with attitudinal changes. Should future studies of this kind produce similar results, the implications for research and education are as follows:

1. Simple pretest-posttest designs may be misleading and future research should consider more seriously the use of delayed posttesting.

2. Educators and especially those in social studies should begin examining the interaction between cognitive knowledge and attitudes at least in reference to ethnic relations rather than being content with treating the
cognitive and affective as two dichotomous domains.

3. Finally, since a review of the findings suggest that ethnic relations education may affect certain aspects of attitudes more than others, future research should attempt to identify which components of an attitude are affected.