

A FOLLOW-UP COMPARISON OF THE ATTITUDES OF TEACHERS  
WHO EITHER DID OR DID NOT PARTICIPATE IN A  
HUMAN RELATIONS INSTITUTE

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A Thesis  
Presented to  
the Faculty of the Graduate School  
University of Houston

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

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by  
John H. Grauke  
December 1970

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## ABSTRACT

Grauke, John. "A Follow-Up Comparison of the Attitudes of Teachers Who Either Did or Did Not Participate in a Human Relations Institute." Unpublished Master's thesis, University of Houston, December, 1970.

The thesis uses data provided by the Research Center at Houston Baptist College to compare the attitudes of a group of teachers (IP) who participated in Human Relations Institutes with the attitudes of a random sample of teachers (RS) from the same schools who did not participate in the Institutes. The first hypothesis is that the difference between the means of the white IP and the white RS will be greater than the difference between the means of the black IP and the black RS. The second hypothesis is that the difference between the means of the IP and RS will be greater on the attitude scale "Attitudes to Segregation," than on the experience scale "Previous Behavior Patterns with People of the Opposite Race." The third hypothesis is used to test the assumption that the IP and the RS are parallel groups. It is hypothesized that the attitude pattern created by stratifying the IP by age, sex, and marital status will be similar to the attitude pattern of the RS stratified by age, sex, and marital status. Subjects for this study consist of an experimental group of institute participants and a random group. There were 203 teachers who were IP subjects and 262 RS subjects who were teachers drawn at random from the same schools as the IP subjects. From the total of both IP and RS subjects, 350

usable questionnaires were obtained. Raw score data profiles were tabulated for the two groups and analyzed statistically by computer. When testing for significance of difference between the IP and RS, the Z-test was used. When testing for significance of difference for variables within the IP, or within the RS, the t-test for significance of difference between two groups was used. The first hypothesis is confirmed at a high level of confidence by the data. There is significantly more difference between the white IP and the white RS than between the black IP and the black RS. The second hypothesis is partially confirmed by the data on black subjects. The data on the white subjects showed no difference in the response to an experience scale and an attitude scale. The results indicate that the black IP and the black RS are parallel groups and that the IP is insignificantly different from the RS due to the experience of human relations training. The white IP and the white RS are not parallel and the difference between the white IP and the white RS cannot be accredited to human relations training on the basis of this data. It is concluded that there is a wide range of attitude among white teachers concerning members of the black race, and that those who volunteer for human relations training tend to be those with the most favorable attitudes.

## TABLE OF CONTENTS

	Page
LIST OF TABLES . . . . .	1
 Chapter	
1. THE PROBLEM AND LIMITATIONS OF THE STUDY . . . .	1
PROBLEM . . . . .	2
LIMITATIONS . . . . .	4
Samples . . . . .	4
Institutes . . . . .	6
Attitudes . . . . .	7
ORGANIZATION . . . . .	7
2. REVIEW OF THE LITERATURE . . . . .	8
3. METHODOLOGY . . . . .	19
SUBJECTS . . . . .	19
Institute Participants . . . . .	20
Random Sample . . . . .	20
INSTRUMENTS . . . . .	22
Experience Scale . . . . .	24
Behavior Scale . . . . .	25
Stereotype Scale . . . . .	31
Integration Scale . . . . .	32
Segregation Scale . . . . .	32
Anti-White and Anti-Negro Scales . . . . .	34

Hypothetical Situations Scale . . . . .	37
PROCEDURE . . . . .	43
4. RESULTS . . . . .	47
RACE . . . . .	50
SCALE . . . . .	54
SOCIOCULTURAL VARIABLES . . . . .	57
Age . . . . .	58
Sex . . . . .	60
Marital Status . . . . .	62
Education . . . . .	66
5. SUMMARY AND CONCLUSIONS . . . . .	69
APPENDIX . . . . .	78
BIBLIOGRAPHY . . . . .	82

## LIST OF TABLES

Table	Page
1. Item Discrimination Data for "Previous Behavior Patterns with People of the Opposite Race" Scale . . . . .	26
2. Item Weights for "Behavior Patterns with People of the Other Race" Scale . . . . .	29
3. Item Discrimination Data for "Stereotype" Scale . . . . .	31
4. Item Discrimination Data for "Attitude Toward Social Integration" Scale . . . . .	33
5. Item Discrimination Data for "Attitude Toward Segregation" Scale . . . . .	35
6. Item Discrimination Data for "Anti-White" (for Non-Whites Only) Scale . . . . .	38
7. Item Discrimination Data for "Anti-Negro" (for Non-Negroes Only) Scale . . . . .	40
8. Item Discrimination Data for "Attitude Toward People of the Other Race in Hypothetical Situations" Scale . . . . .	42
9. Interviews in Fall 1968 by Race and Sample Type. .	44
10. Difference in High and Low Mean Scale Scores on Seven Scales Controlling for Race and: Marital Status; Sex; Age; and Education . . . .	49
11. Difference Between Mean Scores of IP and RS on Seven Scales Controlling for Race . . . . .	52
12. Difference Between Mean Scores of IP and RS on Seven Scales Controlling for Race and: Age; Marital Status; Sex; and Education . . . .	53
13. Difference Between Mean Scores of IP and RS on Two Scales Controlling for Race and: Age; Marital Status; Sex; and Education . . . .	56



Table	Page
14. Difference Between Mean Scores of Two Age Groups on Seven Scales Controlling for Race and Sample Type . . . . .	59
15. Difference Between Mean Scores of Males and Females on Seven Scales Controlling for Race and Sample Type . . . . .	61
16. Difference Between Mean Scores of Three Marital Groups on Seven Scales Controlling for Race and Sample Type . . . . .	63
17. Difference Between Mean Scores of Two Educational Groups on Seven Scales Controlling for Race and Sample Type . . . . .	68
18. Mean Scale Scores for Different Age Groups Controlling for Race and Sample Type . . . . .	78
19. Mean Scale Scores for Males and Females Controlling for Race and Sample Type . . . . .	79
20. Mean Scale Scores for Three Different Marriage Groups Controlling for Race and Sample Type. . .	80
21. Mean Scale Scores for Different Educational Groups Controlling for Race and Sample Type. . .	81

## Chapter 1

### THE PROBLEM AND LIMITATIONS OF THE STUDY

Discrimination and segregation have been the rule rather than the exception in American history. Desegregation in the seventies is still a large and persistent problem. It can be said that most programs for desegregation are just now being implemented or have already failed. Nowhere in Texas, and certainly nowhere in Houston, is there, thus far, the prototype of an integrated situation. It appears that even though laws provide for equality of the races, other steps must be taken before desegregation is a reality.

The study of attitudes provides a worthwhile step toward the amelioration of the problem. Attitudes significantly influence man's responses to members of other races. It has been affirmed that if the attitude of a person toward other races is known, it can be used in conjunction with situational and other dispositional variables to predict and explain his reactions to their members. To the extent that principles governing the change of attitudes are known, they may be used to manipulate the individual's reactions to that race (Shaw, Wright, 1967).

## PROBLEM

It was the purpose of this study to compare the attitudes of a group of teachers who participated in Human Relations Institutes with the attitudes of a random sample of teachers from the same schools who did not participate in the Institutes (1) to determine if black teachers profited as much (as indicated by positive attitude differences) from the Human Relations Institutes as did white teachers, (2) to test whether experience will remain constant while attitude changes, and (3) to see if the direction and degree of difference in attitude stratified by age, marital status, and sex is the same for participants and non-participants in the Human Relations Institutes.

The Research Center at Houston Baptist College is presently engaged in a three-year project entitled "The Mental Health of Teachers and School Desegregation." This project focuses upon "the attitudes and behavior characteristics of teachers and pupils involved in school desegregation" (Abstract, TMHOTASD). In dealing with this problem, a large amount of data have been compiled which are of interest in areas tangential to the mental health of teachers.

The principle investigator at the Research Center is a sociologist, Dr. Jerry Robinson, Associate Professor of Sociology at Houston Baptist College. The Research Center employs a secretarial staff and a computer programmer.

The investigators at Houston Baptist College have gained unique acceptance by the Houston Independent School District. Through the use of standardized questionnaires and personal interview techniques, they have collected data which is unattainable from other sources. These data have been computerized and are readily available to study the problem of interest to this thesis.

Since the initiative for desegregation has been taken by the federal government, the public schools relying on federal funds have served and are serving as battlegrounds for desegregation. In 1954, Brown vs. Board of Education stated that "separate educational facilities are inherently unequal," yet today some sixteen years later, Houston is still involved in court suits fighting to perpetuate segregation.

Research dealing with the attitudes of teachers, black and white, toward members of the opposite race is of importance. With the fight being held to a great extent in public schools, they are very "close to the action." As a group, teachers are an important part of the American population. They are important because of their influence in molding the minds and attitudes of children who will one day determine the success or failure of the present desegregation efforts.

## LIMITATIONS

### Samples

The basic limitation of this study lies in the comparability of the two samples. The institute participants (IP) were volunteers while the non-participants (RS) were randomly selected. As noted by Miles, "the persons appearing for human relations training are highly self-selected, and it is excessively difficult to get comparable pools of subjects to serve as members of control groups" (Miles, 1960). This limitation is lessened somewhat by the fact that the random sample was drawn from the schools of the institute participants.

The Houston investigators compared the IP and RS groups by  $X^2$  as a measure of "goodness of fit." The results of their analysis showed no significant differences in the following:

- Age
- Current marital status
- Length of in-district residence
- Length of in-home residence
- Previous residence in North or West
- Attendance at segregated undergraduate college
- Birthplace in South
- Home ownership
- Employment roles (elem.-sec. teacher, special categories)
- Democrat-Republican political party membership
- Number with working spouses
- Number whose working spouses are professionals
- Nature of father's occupations
- Current family income
- Membership in local professional teachers' organization
- Evaluation of local professional teachers' organization

Church membership  
Church attendance  
Church office holders

Two important areas in which there are significant differences are sex and educational achievement. There were more black males among the institute participants, and there were more black institute participants who had their master's degree. It should be noted that there are no studies, to the author's knowledge, which indicate that educational achievement above the bachelor's degree has any significant relation to prejudice.

Some of the studies in the literature employed a similar methodology (Kinnick, 1966) (Holmes, 1967). One such study referred to the experimental design as a "compromise experimental group-control group design" (Kinnick, 1966).

The sample limitation is further alleviated by the statistical treatment of the two samples. The IP teachers are treated as a population which might be described as "all those who have volunteered for institute training during 1967 and 1968." They do not constitute a probability sample, but a population for which the parameters  $m$  and  $\sigma$  are known. The RS group, however, does meet the criteria for a probability sample and, hence, the question submitted for testing is not whether both groups could have come from a common population, but if the mean of the RS sample could, by chance alone, have come from the IP mean.

### Institutes

All of the IP teachers did not attend the same "Human Relations Institute." The Institutes, however, were a part of a common project, "Human Relations Workshop on Problems of School Desegregation," sponsored by Texas Southern University in cooperation with the University of Houston, the University of St. Thomas, and Prairie View A & M College. The Institutes were comparable in form, content and administration. They met for twelve consecutive Saturdays, six hours per session. Films, lectures, field trips, and sensitivity training were used to improve the teachers' concepts, attitudes, and understanding of desegregation and its relationship to the teaching-learning situation. A portion of the purpose of the Research Center at Houston Baptist College is to evaluate the effectiveness of the Institutes in accomplishing these goals.

The search of the literature indicates the methodological limitation of using different Institute groups to form one N for analysis (Kinnick, 1967; Miles, 1960). Due to the nature of human relations training, it is important to have a small group. For statistical purposes, a large N is needed which requires that the participants in more than one Institute be pooled. It is assumed by the author that the differences in the Institutes are minute and for the present study will not require further mention.

## Attitudes

It is exceedingly difficult to measure attitudes. Some would maintain that it is impossible, their contention being that what is measured is not an attitude but an opinion. In trying to deal with the problem many conceptual models have been devised. One such model posits the existence of two attitudes for every action (Rokeach, 1966). There is the attitude toward the object (Ao), and the attitude toward the situation (As). A verbal expression of an attitude might be any one of four combinations of these two attitudes. A verbal expression of an attitude might express the (1) true Ao and true As, (2) false Ao and false As, (3) true Ao and false As, or (4) false Ao and true As. Accounting for these possibilities in the present research is an impossibility. The present study is limited in that it assumes that the responses of subjects on standardized questionnaires are measures of their actual attitudes.

## ORGANIZATION

The first two chapters present the problem with its limitations and review the literature on the problem area. The third chapter deals with the methodology to be employed. In the fourth chapter results are analyzed. A summary and some conclusions are found in the fifth chapter.



## Chapter 2

### REVIEW OF THE LITERATURE

The South provides an atmosphere conducive to the study of racial attitudes. Desegregation, prejudice and anti-Negro feelings are very real issues for people in the South. Southern white adults are typically more anti-Negro in their attitudes and actions than are Northern white adults. Persons in the South, frequently have anti-Negro feelings even though their personality is not generally ethnocentric. However, the South cannot be considered as monolithic when answers to the problems of prejudice and discrimination are sought (Tumin, 1958:3; Mrydal, 1944: Prothro, 1952:427).

There have been many studies dealing with the sociocultural correlates of prejudice. Research has consistently shown a negative correlation between the amount of education and prejudice. The higher the educational level of a group, the lower will be the level of prejudice. The educational level of the group receiving prejudice is also negatively correlated to prejudice. Early studies of the relationship between status and anti-Negro prejudice indicated that class differences in prejudice were minute, but more recent studies indicate that the two variables are

inversely related (Williams, 1964:259; Tumin, 1958:96-104; Noel, 1969:609; Westie, 1954:584-591).

The inconsistencies and contradictions encountered when associating age, marital status and sex with prejudice have led Gordon Allport to conclude that although findings hold "for single studies, they do not form a firm basis for generalizations." (Allport, 1954) Robin Williams' findings indicate that the old are more prejudiced than the young, the single are less prejudiced than any other marital status group, and women are more prejudiced than men (Williams, 1964).

Attitude change is difficult to affect. This is the conclusion of numerous studies devoted to the nature of attitudes and how to affect change in attitudes. It has been established through research that weak attitudes are more susceptible to change than strong attitudes (Harvey, Rutherford, 1958:61-68). As attitudes become more crystallized, more effort must be induced to affect their change. Katz has shown that a dissatisfaction with a person's self-concept is a prerequisite to affect change (Katz, 1960:163-204). Miles, in a model for change, shows "desire for change" as a personality trait a person must possess in order to change (Miles, 1960). Various studies have indicated that attitudes cannot be forcibly changed (Rokeach, 1966:529-550). A person might express an opinion in the presence of a force, which indicates an attitude change, but the attitude does not necessarily remain changed in the absence of the force.

It has been indicated in the literature that attitudes are often expressed in action, and action may determine attitude. In other words, behavior change may precede attitude change (Katz and Scotland, 1959:423-475). According to an adage used by Alcoholics Anonymous, "You can act your way into a new way of thinking better than you can think your way into a new way of acting." Melvin Tumin showed that as people reduced their resistance to desegregation, they did so more in their actions than in their attitudes (Tumin, 1958).

Studies dealing with the stubborn nature of attitudes have shown that reference group and degree of conformity have effect on the stability of attitudes (Kelley, Volkart, 1952:465). Fendrich indicated that reference group support determines both racial attitudes and overt behavior (Fendrich, 1967:970). This factor makes the normative characteristics of groups very important in the process of social change (Fauman, 1968:53-60). In line with these findings are those which indicate that a change in attitude will be accompanied by a detachment from those groups from which initial support was derived. Correspondingly, the attitude shift will be in the direction of the norms of those groups with which the person develops new attachments and identifications (Pearlin, 1954:47-50).

In research dealing with prejudice, some factors have been found to be helpful in affecting positive attitude change.

Contact with members of another race has caused reduction in prejudice toward that race (Koepper, 1966). A study dealing with the effects of community field experience on the tolerant-prejudice attitude of prospective secondary teachers showed a reduction in anti-Negro prejudice associated to a significant degree with selective contacts with Negroes on the campus and in the community (Holmes, 1967). Contact, however, does not insure a reduction in prejudice. Mussen has shown that the decrease in prejudice seems to be related to personality structure and whether the contact is felt to be rewarding (Mussen, 1948:441).

In an exploratory study to determine the relative overall effectiveness of two change procedures, it was found that unfavorable attitudes toward the Negro were not changed by an informational approach. Attitudes were more effectively influenced through attempting to give insight into the self than through giving insight into the objective nature of the problem (Katz, Sarnoff, McClintock, 1956:27-46). This idea, that prejudice can be reduced through an indirect self-insight approach, necessitates a look at the Human Relations Institute as a possible tool in affecting such reduction.

Laboratory human relations training is generally conceded to have begun in 1946, at a conference for inter-group relations workers staffed by associates of Kurt Lewin. It was advanced the following year at Bethel, Maine, when some of the same staff conducted the first session of the National

Training Laboratories, originally known as the National Training Laboratory in Group Development. According to Miles there are certain themes central to human relations training: (a) the concern for bridging the world of human sciences to that of practical affairs; (b) the conviction that learning is essentially an inductive experience-centered matter, stemming from the examination of here-and-now data; and (c) the steady capacity for ingenious invention and development of experimental teaching methods (Miles, 1962).

Miles offers this as a definition of human relations training: "intensive group self-study procedures, usually taking place in a residential setting, and designed to bring about increased sensitivity and skill in relation to social-psychological phenomena occurring in interpersonal, group, and organizational situations" (Miles, 1962). The focus is on "improving the person's sensitivity to social phenomena, on increasing the sophistication with which he is able to diagnose the reasons for ineffective interpersonal and group situations, and, of course, on his ability to act effectively and satisfyingly in concert with others" (Miles, 1960).

The laboratories are interested in helping the individual or group assess needs for change and to help in determining ways in which changes may be achieved. The desired direction of learning and change is toward a more integrative and adaptive interconnection of values, concepts, feelings, perceptions, strategies, and skills (Bradford,

Gebb, Benne, 1964). From the definition and focus of human relations training the implications for reduction of prejudice are indicated.

Human relations training procedures reported in the literature involve a "laboratory" involving thirty to 150 people, meeting in group setting for varied lengths of time. Some "labs" meet continuously for the duration of the training, others spread the training over four or five weeks. The composition of the laboratories may be occupationally homogeneous (Gordon, 1950), or heterogeneous as the prototype situation in Bethel, Maine (Burke, Bennis, 1961).

In the twenty-four years since the first human relations laboratory, a large number of research studies have been conducted (Stock, 1964). The research has ranged from a consideration of the character of the training group (Back, 1948), to emphasis on the individual member of the group (Blake, Mouton, Fruchter, 1964), and to the impact of the training on learning and change (Stock, 1964). This last area contains findings that are relevant to the present study.

Human relations training is aimed toward increasing sensitivity toward group processes, increasing awareness of the character of one's own group participation, and increasing one's ability to deal with a variety of group situations (Stock, 1964). The hope of the researchers is that the training will provide enduring changes in the behavior and perceptions of participants when they return to the sterner

climate of their home organizations (Bradford, Gibb, Benne, 1964).

To get at the nature of learning invoked by human relations training, a research team from the University of Michigan collected extensive data during the summers of 1951 and 1952 (Watson, Lippitt, Kallen, Zipf, 1961). Through the use of questionnaire and interview data the authors report that a complex of feelings and attitudes which they call "response set" appeared to be an important factor. That is, there was high correlation between the descriptions participants gave of the "back home" situation and their attitudes toward laboratory training. Those who tended to describe their jobs as high in change potential gave favorable answers to a series of questions about their training experience. People who expected that their training would not be relevant later reported that they had made little use of the techniques after they returned home.

Regarding the influence of personality the authors reported that, on the whole, personality seemed more related to the ways in which people responded to questionnaires than to their behavior in the group or later application of learnings (Stock, 1964).

Matthew B. Miles developed a general theory about laboratory training in studying change at a laboratory for School Principals (Miles, 1960). He believed that the learner must: have a desire to change, unfreeze old behavior

patterns, become actively involved in the "give and take" of training group action, and receive "feedback" information on the effects of his behavior on other persons in the group in order to change. Ego strength, flexibility and need affiliation are personality factors thought to influence the degree to which a given process factor would or would not reach optimal value in aiding learning.

Miles found that the laboratory participants changed significantly more than the control subjects. Using an open-ended perceived change measure, 73 percent of the experimental subjects showed change, while only 17 percent and 29 percent of the two control groups showed change. A content analysis of the changes reported by self and job associates showed the changes to be insensitivity and behavioral skill (i.e., "listens more," "communicates better," "shares decisions more," "gives help to teachers").

Douglas Bunker used a modification of Miles' methodology in studying the long-range effects of participation in the 1960 and 1961 summer laboratories at Bethel, Maine (Bunder, 1963). The inquiry focused upon individual behavior changes in the trainee's experience. Significant differences between controls and participants were revealed in both the magnitude of change scores and the kinds of changes described. Participants were seen by respondents to have changed more than controls particularly in the following areas: communicating more clearly and effectively with



co-workers; sharing and encouraging responsibility and participation among peers and subordinates; and in analytic understanding of human behavior. The participants also showed greater insight into group processes, more sensitivity to the feelings and needs of others and increased understanding of self and personal roles.

R. L. Burke and W. G. Bennis investigated perceptual changes in members of groups, owing to their psychological interest, and because they so often seem a necessary concomitant for more overt behavioral changes (Burke, Bennis, 1961). Their research reported two types of perceptual change: changes in the perception of self, and changes in the perception of other group members. A "Group Semantic Differential" test was administered at the beginning and again at the end of training. "It was found that perception of self and of ideal self tended to converge, mainly because of changes in the way the self was perceived rather than in the way the ideal self was conceptualized. It was also found that the way people see themselves and the way in which they are seen by others become more similar over time" (Short, 1964).

Two studies deal with the effect of human relations training on the teacher (Gordon, 1950; Bowers and Soar, 1960). Based on sixteen interviews, Gordon reported that after training teachers most often made statements depicting a "new or reinforced understanding of self," and actual "changes in self." Examples of statements indicating changes in self

were, "I feel: more accepting of others; more respect for others; more tolerant of interpersonal differences; and, more sensitive to the feelings of others."

Irwin Rubin conducted an experiment to test the hypothesis that increases in self-acceptance, resulting from sensitivity training, have the theoretically predictable but indirect effect of reducing an individual's level of ethnic prejudice (Rubin, 1967). Rubin's sample consisted of the participants in the Osgood Hill 1965 summer program in sensitivity training. His experimental design was one in which the subjects served as their own controls.

In this experiment, Rubin decided to focus upon the norm of "human-heartedness" (HH) which enjoins a person's emotional acceptance-of-others in terms of their common humanity, no matter how different they may seem from oneself. He predicted that an individual's level of human-heartedness would increase. His prediction was substantiated at the .01 level based on the difference between the "before" HH and "after" HH means (t-test for dependent samples).

Bernard C. Kinnick conducted an investigation to ascertain whether an eleven-week graduate training institute would have a significant effect on changing attitudes of participants toward Negroes and school desegregation (Kinnick, 1966). When compared to a control group, the participants were found to express greater tolerance and acceptance of Negroes and desegregation practices.

In summary, a review of the literature has pointed out the South as having a desegregation problem. Research has not established a firm base for generalization regarding the relation of prejudice to age, sex and marital status. High socioeconomic status and high education have been fairly consistently related to low levels of prejudice. Attitudes, though hard to change, are most influenced by an increase in self-insight. A person must become aware of areas within himself that he would like to change, before he can be changed. Human relations institutes have been successful in making participants more sensitive to themselves and thus more sensitive to others. The hypothesis that a reduction in prejudice can be brought about by increased self acceptance caused by human relations training has been accepted.

The present research is needed to expand the body of available knowledge concerning human relations training and its relation to a reduction in prejudice. The effect of the Houston Human Relations Institutes on Houston teachers is not known. It is not established in the literature whether the human relations training produces like results in black and white teachers. The present research seeks to provide information concerning these issues. In addition, the effect of the Institutes will be measured using scales which are established in the literature as being adequate indicators of prejudice.

## Chapter 3

### METHODOLOGY

The concern of this thesis is in determining what effect human relations training has on the racial attitudes of Houston teachers. Specifically, this research is interested in: whether a black teacher will profit as much from human relations training as the white teacher; whether attitude measured by experience remains constant while attitude measured by opinion changes; and, whether the attitude "pictures" of two groups, stratified along socio-cultural lines are similar. The methodology employed to deal with these concerns is presented in this chapter. These topics will be considered: (1) subjects, (2) instruments, (3) procedure.

### SUBJECTS

Subjects for this study consisted of an experimental group of Institute participants (hereinafter referred to as IP) and a random sample group (hereinafter referred to as RS). There were 203 teachers who were IP subjects and 262 RS subjects who were teachers drawn at random from the same schools as the IP subjects. From the total of both IP and RS subjects, 350 usable questionnaires were obtained. The

investigators at the Houston Baptist College Research Center give the following as the rationale and procedures in selecting the members of both groups.

#### Institute Participants

There were 185 teachers enrolled in the spring Institute of 1967. The investigators decided to include the 40 additional teachers who participated in the advanced Institute during the summer of 1967, making a total of 235. Twenty-two teachers from this group were subsequently eliminated, since fifteen were teachers from another district and seven moved or transferred to another district. The IP total consisted of the 203 remaining teachers. It was learned later that several other teachers had moved (Sampling Procedures, TMHOTASD).

#### Random Sample

In order to find a control group comparable to the IP, the investigators at the Research Center determined that the RS should be selected from the schools where the actual participants were teaching. Every teacher who was not an institute participant in the given schools had an equal chance of appearing in the sample. The investigators projected a sample size of 265, hoping to have a random sample comparable in size to the IP.

In order to select the random sample of non institute participants, a pre-publication copy of the directory for the

Houston ISD was obtained during the last week of August. The directory contained the names of all teachers assigned to schools which would open September 1. Both the list of schools and the list of names were in alphabetical order. The sample was drawn from a table of random numbers (See, Lindquist, Statistical Analysis in Educational Research, p. 25). Any digit from 0-9 had an equal chance of appearing in any given position in the table. The rows in the table were assigned a number which corresponded to the number the school had in the HISD directory. A list was made of the schools where teachers who attended the Institute were teaching.

Using the table of random numbers and the HISD directory, the random sample was selected. Each row of the table represented a school. Therefore, the first number appearing in the column was used to select the first teacher, the second number was used to select the second teacher and so on until the sample size was completed. If a teacher was drawn who was an Institute participant, she was eliminated, and the procedure was repeated to select another teacher (Sampling Procedures, TMHOTASD).

In addition to the similarity of the IP and RS groups derived from the fact that both taught in the same schools, a comparison of Institute participants to the random sample by  $\chi^2$  as a measure of "goodness of fit" showed no significant differences in the following:

Age  
 Current marital status  
 Length of in-district residence  
 Length of in home residence  
 Previous residence in North or West  
 Attendance at segregated undergraduate college  
 Birthplace in South  
 Home ownership  
 Employment roles (elem.-sec. teacher, special categories)  
 Democrat-Republican political party membership  
 Number with working spouses  
 Number whose working spouses are professionals  
 Nature of father's occupations  
 Current family income  
 Membership in local professional teachers' organization  
 Evaluation of local professional teachers' organization  
 Church membership  
 Church attendance  
 Church office holders

There was a significant difference between the groups with regard to sex and educational achievement. There were more black males among the Institute participants, and more of the Institute participants had earned the master's degree. The educational difference is not extremely important since all respondents had received the bachelor's degree. No studies, to the author's knowledge, have indicated that education above the bachelor's degree has any relation to racial attitudes. However, these variables will be considered in determining relations.

## INSTRUMENTS

The data of interest to this thesis were gained through the use of a standardized questionnaire. This instrument was constructed by the investigators at the Research

Center using some original scales and borrowing some scales from previous research. The questionnaire was constructed during the months of July and August, 1968, and it was pre-tested at Prairie View A & M and Paul Quinn Colleges where teachers were participating in an institute on problems of school desegregation. Extensive revisions were made because of this pre-testing.

Section I of the questionnaire included sociocultural variables. Section II dealt with the level of organizational participation. Sections III and IV dealt with favorable and unfavorable experiences with members of the opposite race. Section V contained two scales derived from a person's self-report of experiences with people of the other race. The first of these scales originated with Ford (Ford, 1941) and the second with Rosander (Rosander, 1937). Attitudes and opinions toward the community, integration, and people of the other race were contained in Section VI of the questionnaire. The following scales were included in the questionnaire.

- A. Attitude toward the community (Robinson, 1966)
- B. Attitude toward the school district  
(Robinson, 1968)
- C. Stereotyping (Williams, 1964)
- D. Attitude toward integration (Robinson, 1968)
- E. Attitude toward segregation (Rosenbaum,  
Zimmerman, 1959)
- F. Attitude toward persons of the opposite race  
(Steckler, 1957)
- G. Attitudes toward people of the other race in  
hypothetical situations (Westie, 1965)
- H. Commitment to traditional American ideals  
(Westie, 1965)

The questionnaire was tested for validity and reliability by investigators at the Research Center. The



scales were revised allowing only those items with indices of 0.20 or higher (as determined by Gronlund's formula) to remain in the scales (Gronlund, 1965:211). Item and scale variances were computed using grouped data techniques and identical response weights as applied to determine scale totals. The Kuder-Richardson Formula 20 was used in determining coefficients of internal consistency for the various scales (Crittenden, Roff, Robinson, 1970). The discrimination powers and reliability coefficients obtained were sufficient for the investigators to conclude that scale totals could be used in future analysis of the same population of teachers.

This thesis is interested in the scores of the respondents on seven scales, as revised, in "Measurement of Interracial and Community Attitudes of Houston Teachers: Eleven Scales" by Crittenden, Roff, and Robinson. Information gained in Sections I and II of the questionnaire concerning sociocultural variables will be used for controls in determining relationships between independent and dependent variables.

### Experience Scale

The seven scales used in this thesis deal with various aspects of white-black relations. The first scale, developed by Ford, was created to indicate the experiences which white Americans have had with blacks (Ford, 1941). Ford's hypothesis was that social experiences could be scaled. His research sustained his hypothesis and also indicated that a person's experiences and his attitudes are positively related.

Ford believed an experience scale to be different from an attitude scale because attitude shifted when experience as measured did not.

Twelve items whose discrimination indices were 0.20 or higher comprise the scale (Crittenden, Roff, Robinson, 1970). The respondent was asked to choose one of five responses which were weighted from 1 to 5 with greater weights being assigned to responses implying lesser degrees of prejudice. Table 1 contains the scale items and indices of discrimination. These data yielded a reliability coefficient of 0.64.

### Behavior Scale

The scale originating with Rosander was intended to be a scale which reflected actual behavior. In his research he obtained a high degree of commonality between the opinion scale and the attitude scale. His contention was that the behavior scale was so much more specific that one could obtain a sharper picture of an individual's attitude pattern than he obtains from the more or less general statements of opinion which appear in the opinion type scale (Rosander, 1937). There were 22 items in the scale, and weights determined by the scale's author were used in the current survey. Respondents were asked to check items which identified their probable reactions, and "X" those items which they would not commit. The median score of the scale values of the endorsed items was a respondent's total score. High scores indicated a favorable attitude toward interaction with people of the other race. Table 2 contains the item texts and weights.

Table 1

Item Discrimination Data for "Previous Behavior Pattern  
With People of the Opposite Race" Scale

Item No.	Item	Index Discrimination
1.	Under what conditions have you shaken hands with a Negro (or <u>white</u> )?	+
	5. Follow same rules that I follow for whites (or <u>Negroes</u> )	
	4. When I meet a Negro (or <u>white</u> ) friend who would expect me to	
	3. Situation calling for a decision never arose	
	2. To show friendship for a Negro (or <u>white</u> ), provided he knew his place	
	1. Under no circumstances	
2.	Have you ever been annoyed by white people (or <u>Negroes</u> ) who were acting too friendly toward Negroes (or <u>whites</u> )?	+
	1. Yes, on many occasions	
	2. Yes, a few times	
	3. Haven't had much chance to observe	
	4. No	
	5. Never; my observation has been that whites (or <u>Negroes</u> ) are not too friendly toward Negroes (or <u>whites</u> )	
3.	Have you ever noticed that Negroes (or <u>whites</u> ) have a disagreeable body odor?	+
	1. Many times	
	2. A few times	
	3. Never noticed	
	4. Yes, but under circumstances where whites (or <u>Negroes</u> ) smell just as disagreeable	
	5. The Negroes (or <u>whites</u> ) whom I have met are as clean or cleaner than whites (or <u>Negroes</u> )	
4.	Have you ever approved of quick justice (as sometimes dealt by white (or <u>Negro</u> ) men outside of court) to a Negro (or <u>white</u> ) who has been accused of a crime against a white person (or <u>Negro</u> )?	
	5. Never under any circumstances	
	4. Yes, but I would no longer approve	
	3. Don't know of such a case at first hand	
	2. Yes, but only when the offense was a very serious c	
	1. Yes	

Table 1 (continued)

Item No.	Item	Index of Discrimination
5.	Can you recall actual cases where Negroes (or <u>whites</u> ) in public places seemed to be looking for trouble? 1. Many of them 2. A few 3. Few chances to observe such situations 4. Yes, but under circumstances where whites (or <u>Negroes</u> ) would have done the same 5. None	+0.46
6.	Under what circumstances have you gone to the home of a Negro (or white)? 5. For a friendly visit 4. Usually on business, but sometimes for other reasons 3. Never had reason to 2. On business or to show friendship, provided the Negro (or <u>white</u> ) knew his place 1. Under no circumstances	+0.21
7.	Think of the Negro (or <u>white</u> ) who has the finest qualities of character of all the Negroes (or <u>whites</u> ) whom you know, where would you rate him in comparison with the whites (or <u>Negroes</u> ) you know? 5. Above any whites (or <u>Negroes</u> ) I know, outside of my family 4. Equal to my white (or Negro) acquaintances 3. Cannot answer: don't know any Negroes (or <u>whites</u> ) well enough 2. Below whites (or <u>Negroes</u> ) in general 1. Below the meanest of whites (or <u>Negro</u> ) people	+0.31
8.	What has been your policy in the past when a Negro (or <u>white</u> ) came into a public place, such as theater, waiting room, or restaurant? 1. Let the Negro (or <u>white</u> ) know he wasn't wanted 2. Let him alone so long as he knew his place 3. Situation never arose 4. Tried to pay no attention to the situation 5. Treated him as I did whites (or <u>Negroes</u> ) in similar circumstances	+0.31

Table 1 (continued)

Item No.	Item	Index of Discrimination
9.	Have you ever had trouble with Negroes (or <u>whites</u> ) because you thought they were getting out of their place?	+0.30
	5. On the contrary, I have defended Negroes (or <u>whites</u> ) who were being put in their place	
	4. No trouble	
	3. Have seldom been in position where this might have happened	
	2. On a few occasions	
	1. Many times	
10.	Have you ever permitted Negroes (or <u>whites</u> ) to come into your home for friendly visits?	+0.33
	1. Positively never	
	2. Yes, if they knew their place	
	3. Situation calling for a decision never arose	
	4. On a few occasions	
	5. Yes, frequently	
11.	Have you ever called Negroes (or <u>whites</u> ) "niggers" (or " <u>whiteys</u> ") when talking to them?	+0.44
	5. Never	
	4. Yes, but I have since regretted it	
	3. Never had reason to	
	2. Yes, when sufficiently aroused	
	1. Many times	
12.	Which of the following descriptions most accurately represent Negro (or <u>white</u> ) workers whom you have seen?	+0.58
	1. Very poor workers; did the least possible amount of work	
	2. Poor workers even when directed	
	3. Not enough opportunity to make such a judgment	
	4. Good workers when directed	
	5. Very good workers, even show initiative	
Coefficient of Internal Consistency = 0.64		

Source: Crittenden, Roff, Robinson, 1970

Table 2

Item Weights for "Behavior Patterns With People  
of the Other Race" Scale

Item No.	Item	Weight
1.	In the community where you live a Negro (or white) marries a white (or <u>Negro</u> ) girl. You do nothing about it.	6.2
2.	You are bathing at a beach. Some Negroes (or <u>whites</u> ) approach and enter the water near you. You start a fight with them.	1.2
3.	A Negro (or <u>white</u> ) family moves into the residential district where you live. You invite them to your home.	11.5
4.	A Negro (or <u>white</u> ) with a college education is a qualified candidate for Congress from your district. You vote for him on the basis of race alone.	10.8
5.	Your sister takes a friendly interest in an educated and unmarried Negro (or <u>white</u> ) boy to whom she has been introduced. You commend her for her broad-mindedness.	10.3
6.	A Negro (or <u>white</u> ) family moves into the apartment building where you live. You act friendly toward them.	9.2
7.	You stop at a hotel which you discover caters to Negroes (or <u>whites</u> ) as well as to whites (or <u>Negroes</u> ). You remain in the hotel.	7.0
8.	You are reading in a public library. A Negro (or <u>white</u> ) enters and sits down beside you. You leave the library at once.	2.6
9.	A well-educated Negro (or <u>white</u> ) applies for membership in a high school or college society of which you are a member. You move that the constitution of the club be amended to allow Negro (or <u>white</u> ) members.	10.2
10.	You attend a conference at a hotel which will not allow the Negro (or <u>white</u> ) delegates to register. You propose that the Negroes (or <u>whites</u> ) attend the meetings but live in another hotel.	5.8

Table 2 (continued)

Item No.	Item	Weight
11.	In a community where you live a Negro (or <u>white</u> ) attacks a white (or <u>Negro</u> ) girl. You demand that all the Negroes (or <u>whites</u> ) be driven out of town.	1.0
12.	You are bathing at a beach. Some Negroes (or <u>whites</u> ) approach and enter the water near you. You go to some other beach.	3.4
13.	In the community where you live a Negro (or <u>white</u> ) marries a white (or <u>Negro</u> ) girl. You fight for the maintenance of the color line.	2.0
14.	The congregation of the church you attend has always been white (or <u>Negro</u> ). One Sunday morning a Negro (or <u>white</u> ) attends the services. You do nothing about it.	6.3
15.	A Negro (or <u>white</u> ) is put to work in the same department with you so that you have to associate with him every day. You try to have as little to do with him as possible.	4.0
16.	In a community where you live a Negro (or <u>white</u> ) attacks a white (or <u>Negro</u> ) girl. You try to break up the mob which forms.	9.7
17.	A Negro (or <u>white</u> ) family moves into the apartment building in which you live. You treat them coolly.	4.9
18.	A Negro (or <u>white</u> ) is put to work in the same department with you so that you have to associate with him every day. You act friendly toward him.	9.4
19.	You attend a conference at a hotel which will not allow the Negro (or <u>white</u> ) delegates to register. You advise the Negroes (or <u>whites</u> ) to withdraw.	3.6
20.	You see a white (or <u>Negro</u> ) girl whom you know walk down the street with a Negro (or <u>white</u> ) boy. You never speak to her after that.	1.6
21.	A well-educated Negro (or <u>white</u> ) applies for membership in a high school or college society of which you are a member. You consider his application the same as you would that of any other student.	8.1
22.	Your sister takes a friendly interest in an educated and unmarried Negro (or <u>white</u> ) boy to whom she has been introduced. You warn her of the possible consequences of her behavior.	3.8

Source: Critenden, Roff, Robinson, 1970

### Stereotype Scale

The same scale which Robin Williams used in the Cornell studies (Williams, 1964) was used by the Houston investigators to measure stereotypic attitudes. Response alternatives were weighted from 1 (strongly agree) to 5 (strongly disagree). The scale total was calculated by summing the weighted alternatives. High scores reflected a low degree of stereotyping. Item discrimination was weak, but acceptable as indicated in Table 3. The coefficient of internal consistency was 0.67 (Crittenden, Roff, Robinson, 1970).

Table 3  
Item Discrimination Data for "Stereotype" Scale

Item No.	Item	Index of Discrimination
1.	This country would be better off if there were not so many foreigners here.	+0.30
2.	Generally speaking, Negroes are lazy and ignorant.	+0.22
3.	Although some Jews are honest, in general Jews are dishonest in their business dealings.	+0.34
4.	Americans must be on guard against the power of the Catholic Church.	+0.32

Coefficient of Internal Consistency = 0.67

Source: Crittenden, Roff, Robinson, 1970



### Integration Scale

Robinson devised a scale used to survey the respondents' attitudes toward certain aspects of social integration. The six items which were retained by virtue of their discrimination are listed in Table 4. The reliability of this scale was 0.61 (Crittenden, Roff, Robinson, 1970). Response alternatives for positive items (1, 5, 6) were weighted from 5 (strongly agree) to 1 (strongly disagree) with omitted questions being assigned a point value of 3. Weights were reversed for response alternatives of negative items (2, 3, 4). The sum of the weighted alternatives endorsed by the respondent comprised the scale total, causing high scores to reflect a favorable attitude toward integration (Scaling Procedure, TMHOTASD).

### Segregation Scale

A scale, developed by Rosenbaum and Zimmerman, to measure "The Effect of External Commitment on the Response to an Attempt to Change Opinion" was included in the survey (Rosenbaum, Zimmerman, 1959). In the original research, the scale, which was intended to reflect a person's attitude toward segregation, was given to three groups of persons who were known to be advocates of segregation. One group was told during the instructions that it was known that they advocated segregation, another group was told that it was known that they were not advocates of segregation, and the third group received no prior commitment. Their research

Table 4

Item Discrimination Data for "Attitude Toward  
Social Integration" Scale

Item No.	Item	Index of Discrimination
1.	In order to achieve racial balance in the Houston schools it is a good idea to bus children across neighborhood boundaries.	+0.33
2.	It is better for a child if he keeps to playmates of the same religious background as his own.	+0.22
3.	It would be better all around if white children in Houston had swimming pools for themselves.	+0.40
4.	In the South we have pretty much the right slant about separate colleges for white students.	+0.24
5.	Houston would be a better place to live if open housing were a reality.	+0.79
6.	It is wrong to bus children across neighborhood boundaries in order to maintain segregated schools in Houston.	+0.21

Coefficient of Internal Consistency = 0.61

Source: Crittenden, Roff, Robinson, 1970

showed a slight relation between external commitment and a person's response to an attempt to change opinion.

The Houston investigators used the same scale in the 1968 survey. Twenty-three of the items from the original scale had adequate indices of discrimination to be used in the scale on the Houston teachers. The reliability of this scale as computed by the Kuder-Richardson Formula 20 was 0.87 (Crittenden, Roff, Robinson, 1970). Table 5 lists the items and their index of discrimination. Response mode, item weights, scale totals, and item analysis were identical to those of the preceding section. Items 3, 4, 5, 10, 11, 14, 15, 16, 18, 19, and 22 were negative items and were reversed coded (Scaling Procedures, TMHOTASD).

#### Anti-White and Anti-Negro Scales

B. Steckler devised two scales, the "Anti-Negro" and "Anti-white" scales, in his research on the "Authoritarian Ideology in Negro College Students" (Steckler, 1957). He tested an all Negro, middle class group of college students, and determined that their stereotype of the Negro very closely resembled that of the middle class white person's stereotype of the Negro. The two instruments he devised are not congruent. They differ as do the stereotypes of the white and the Negro. These two instruments attempt to expose respondents' anti-white and anti-Negro feelings. The Houston investigators gave the "Anti-white" scale to Negro respondents, and the "Anti-Negro" scale to white respondents.

Table 5

Item Discrimination Data for "Attitude Toward  
Segregation" Scale

Item No.	Item	Index of Discrimination
1.	Racial segregation is an effective and practical social arrangement which has no serious effect on the vitality of democratic ideals.	+0.29
2.	The Negroes' main concern is with equal educational opportunities. They have no intention of interfering with the social patterns of the white community.	+0.47
3.	The best safeguard of a democracy is the solid stability of social tradition such as is involved in the maintenance of segregation.	+0.26
4.	Integration threatens one of the principles of democracy, the right of each citizen to choose his own associates.	+0.41
5.	The end of segregation would bring a continuing increase in social conflict and violence.	+0.40
6.	An integrated school system in the South will eliminate the difference in I.Q. between Negroes and whites.	+0.59
7.	Equal educational exposures in integrated schools helps both the Negro and white students to profit from the best of two cultures.	+0.47
8.	In most cases desegregation can be accomplished without being followed by social conflict and violence.	+0.27
9.	Improving Negro education via integration will lead to a higher standard of living in the South, accompanied by more and better jobs for everybody.	+0.26
10.	The Supreme Court's decision of segregation was a politically inspired invasion of states rights and is a violation of the U. S. Constitution.	+0.32
11.	The Negro race is physically and mentally inferior to the white race and integration will not help to erase the innate differences between the two races.	+0.22
12.	Integrated and therefore better education for the Negro is certain to result in increased feelings of responsibility and cooperation on his part.	+0.27

Table 5 (continued)

Item No.	Item	Index of Discrimination
13.	The successes of already completed integration attempts are clear evidence that the fears of extreme prosegregationists are unfounded.	+0.35
14.	Negroes who are given the opportunity to go to integrated schools are apt to become demanding, officious, and overbearing.	+0.24
15.	Although certain radical Negro leaders try to make people think otherwise, the majority of Negroes do not want integration and would be satisfied with "equal but separate" school facilities.	+0.55
16.	Desegregation will develop a false sense of power among Negroes and will move us closer to having a "Negro party" in America.	+0.31
17.	Integrated schools will enable the Negro race to make a greater contribution to the South economically and socially than they have been able to make with segregated schools.	+0.30
18.	The desegregation law is basically unfair to the Negroes who will now have to compete on equal terms with the whites.	+0.36
19.	Once you start letting Negroes attend the schools of whites, they will demand complete social equality in all respects, including dating and club privileges.	+0.45
20.	Negroes and whites will find it easier to get along together in the same school than most people think.	+0.20
21.	The practice of segregation cannot help but reduce our political influence in international affairs.	+0.55
22.	Desegregation will lead to a permanent lowering of standards in the public schools.	+0.29
23.	Desegregation is economically wise since the South's poor economic state may in part be due to the double expense of segregation.	+0.47

Coefficient of Internal Consistency = 0.87

Source: Crittenden, Roff, Robinson, 1970

The scale item texts and discriminating indices of the "Anti-white" scale are contained in Table 6. An acceptable coefficient of reliability of 0.89 was derived for this scale (Crittenden, Roff, Robinson, 1970). The response mode, item weights, and scale totals were handled as before. There were 204 black teachers who composed the analysis pool.

The "Anti-Negro" scale as shown in Table 7 has a high coefficient of internal consistency, 0.93 (Crittenden, Roff, Robinson, 1970). The response mode, item weights, and scale totals were treated as in the preceding section. The analysis pool was composed of the 196 whites who were interviewed.

#### Hypothetical Situations Scale

The last scale used in this research was constructed by Frank R. Westie as he tried to measure the dilemma which exists in American society because of the ambivalence between the attitudes of people toward traditional ideals and their subsequent behavior (Westie, 1965). Westie administered one scale to determine how closely a person's attitudes reflected American ideals. Another measured the attitudes of the respondents with reference to specific behavioral situations. For instance, the first scale would elicit a person's level of agreement with the statement, "Everyone in America should have equal opportunities to get ahead," while the second scale would ask the respondent if he would "be willing to have a Negro as a supervisor in his place of work." Westie claims

Table 6

Item Discrimination Data for "Anti-White"  
(for Non-Whites Only) Scale

Item No.	Item	Index of Discrimination
1.	There is nothing lower than white trash.	+0.47
2.	White people may be all right, but they carry it too far when they try to butt into the Negro's affairs and go around with Negro women.	+0.38
3.	The whites have shown by their actions that they are naturally immoral, vicious, and untrustworthy.	+0.29
4.	No matter how nicely they treat a colored person, white people don't really mean it.	+0.36
5.	There may be a few exceptions, but white musicians and athletes are definitely inferior to Negro musicians and athletes.	+0.35
6.	White people are only friendly to Negroes when they want something out of them.	+0.27
7.	Negroes can expect no real help from white people in the fight against racial discrimination.	+0.24
8.	Most white people are always looking for ways to cheat and steal from the colored people.	+0.33
9.	The colored race has been pushed around long enough: it's about time that whites were made to get out of the Negro communities.	+0.31

Table 6 (continued)

Item No.	Item	Index of Discrimination
10.	If there is a Heaven, it is hard to imagine that there are many white people up there.	+0.29
11.	Although the white man now rules the world, it will be a happy day when the tables are turned and the colored people become the rulers.	+0.36
12.	When the Bible says, "The bottom shall rise to the top," it gives hope that the Negro people will someday give the orders in this country instead of whites.	+0.45
13.	It may be wrong to damn all whites, but it's plain that whites have all the money and power, and that they look down on anyone who is colored.	+0.42
14.	When it comes to such things as sports, dancing, music, and making love, the white man is not as talented as the Negro.	+0.51

Coefficient of Internal Consistency = 0.89

Source: Crittenden, Roff, Robinson, 1970



Table 7

Item Discrimination Data for "Anti-Negro"  
(for Non-Negroes Only) Scale

Item No.	Item	Index of Discrimination
1.	A large part of the problems facing Negroes today are caused by Negroes themselves.	+0.72
2.	I would rather not marry a person who has very kinky hair, wide nostrils, and thick lips.	+0.55
3.	The lower-class Negro is to blame for a lot of anti-Negro prejudice.	+0.62
4.	Whites and Negroes can get along on jobs until too many Negroes try to push themselves in.	+0.80
5.	One big reason why racial prejudice is still so strong is that Negroes offend people by being so sensitive about racial matters.	+0.60
6.	One important reason why Negroes are discriminated against in housing is that they don't keep up the property.	+0.82
7.	One reason why racial prejudice still exists today is the fact that many Negroes are dirty, loud, and generally offensive in their ways.	+0.88
8.	One trouble with Negroes is that they are even more jealous of each other's success than are whites.	+0.52
9.	Too many Negroes have abused the privilege of attending baseball games by being rowdy, noisy, and cheering only for the colored ballplayers.	+0.32

Table 7 (continued)

Item No.	Item	Index of Discrimination
10.	Segregation and jimcrow will never end unless the average colored person becomes better educated and better mannered.	+0.58
11.	Colored people can hardly be expected to gain social equality until many more of them exert some effort to better themselves and live more decently.	+0.72
12.	With all the drinking, cutting, and other immoral acts of some Negroes, white people are almost justified for being prejudiced.	+0.65
13.	Too many Negroes, when they get a little money, spend it all on whiskey, flashy cars, or expensive clothes.	+0.85
14.	Any white person who marries a Negro is a traitor to his people.	+0.50
15.	A great many Negroes become officious, overbearing, and disagreeable when given positions of responsibility and authority.	+0.48
16.	Negroes would solve many of their social problems if so many of them were not irresponsible, lazy, and ignorant.	+0.88

Coefficient of Internal Consistency = 0.93

Source: Crittenden, Roff, Robinson, 1970

that the difference between these two scores is empirical indication of the problem that Gunnar Myrdal speaks of in "American Dilemma."

The present research is interested in the scores of the respondents on Westie's second scale, "Attitude Toward People of the Other Race in Hypothetical Situations." This scale is assumed to serve as a good predictor of a person's racial attitudes toward situations which he could easily come in contact. Table 8 lists the items with their index of discrimination. The scale has a coefficient of internal consistency of 0.95 (Crittenden, Roff, Robinson, 1970).

Table 8

Item Discrimination Data for "Attitude Toward People of the Other Race in Hypothetical Situations" Scale

Item No.	Item	Index of Discrimination
1.	I would be willing to have a Negro as my supervisor in my place of work.	+0.23
2.	If I went on trial I would not mind having Negroes on the jury.	+0.23
3.	If a Negro's home burned down, I would be willing to take his family into my home for a night.	+0.29
4.	I would be willing to invite Negroes to a dinner party in my home.	+0.49
5.	I would be willing to have a Negro family live next door to me.	+0.36
6.	I don't think I would mind if Negro children were to swim in the same pool as my children.	+0.26
Coefficient of Internal Consistency = 0.95		

Source: Crittenden, Roff, Robinson, 1970

Response alternatives were weighted from 1 (strongly agree) to 5 (strongly disagree). The sum of the weighted alternatives constituted the scale total, and in this case, low scores reflect a positive attitude toward people of the other race.

### PROCEDURE

The teachers who were selected to participate in the study were mailed letters explaining that they had been chosen to participate in an important study in education. The Superintendent of the Houston Independent School District and the Project Director signed the letter. Several opportunities were made available during the months of September and October of 1968 for interviews in groups and teachers were paid a \$5.00 stipend to come to the Houston Baptist College campus and complete the interviews.

The names of those teachers, still in Houston, who did not respond to these efforts were compiled on a list. The questionnaires were placed in an envelope with another letter and given to the principals. The principals had received a letter from the Superintendent requesting cooperation, and asking them to personally see that the teachers received the questionnaire. Thirty more questionnaires were received in this manner. Table 9 gives the number of teachers interviewed by race and IP or RS group.

Raw score data profiles were tabulated for the two groups and analyzed statistically by computer. When testing for significance of difference between the IP and RS, it is recognized that the IP group constitutes a known population which might be described as "All those who have volunteered for institute training during 1967 and 1968." They do not constitute a probability sample, but a population for which the parameters  $m$  and  $\sigma$  are known. The RS group, however, does meet the criteria for a probability sample and, hence, the question submitted for testing is not whether both groups could have come from a common population, but if the mean of the RS sample could, by chance alone, have come from the IP population mean. The test of preference would thus be:

$$z = \frac{\bar{X} - m}{\sigma/\sqrt{n}}$$

When testing for significance of difference for variables within the IP, or within the RS, the t-test for significance of difference between two groups is used.

Table 9

## Interviews in Fall 1968 by Race and Sample Type

	White	Black	Total
A. Institute Participants	60	92	152
B. Randomly-selected non-institute teachers	86	112	198
Total	196	204	350

The first hypothesis of this thesis is that the difference between the means of the white IP and the white RS will be greater than the difference between the means of the black IP and the black RS. The implication if this hypothesis is accepted will be that given a common stimulus, human relations training, the black and white teachers would react differently to that stimulus.

This hypothesis about the population mean will be rejected if the value of  $z$  obtained would occur by chance only 5 times or less in 100, when the hypothesis is true (Edwards, 1966).

The second hypothesis of this thesis is that the difference between the means of the IP and RS will be greater on the attitude scale, "Attitudes to Segregation," than on the experience scale, "Previous Behavior Patterns with People of the Opposite Race." The same confidence limits as above will be used.

The third hypothesis of this thesis is based on the assumption that IP and RS are parallel populations. If this assumption is true, then stratifying the two populations by the sociocultural variables of age, sex, and marital status should yield similar attitude patterns. In other words if, in a particular population, women are more prejudiced than men, then, in a parallel population, the same attitude pattern should be exhibited. It is hypothesized that the attitude pattern created by stratifying the IP by age, sex,

and marital status will be similar to the attitude pattern of the RS stratified by age, sex, and marital status. The t-test of significant difference between two groups will be used to test this hypothesis.

It has been mentioned previously that the IP differed from the RS in the percentage of teachers having the master's degree. To determine if this will cause the results to be spurious, the following hypothesis will be tested: that there is no difference in the mean scores of the participants who have the master's degree and the mean scores of the participants who have only the bachelor's degree in the IP or the RS on any of the scales used in this study. The same method of analysis, and level of confidence will be used as in the preceeding section.

## Chapter 4

### RESULTS

As previous chapters have noted, the elaboration of the differential effects of human relations training on Houston teachers is the aim of this thesis. A group of volunteer teachers who participated in human relations training (IP), and a random sample of non-participants (RS) paralleling in most respects the volunteer groups responded to a questionnaire designed to elicit their attitudes concerning race relations. This chapter will mention some general findings and substantive data will be presented as affected by (1) race, (2) scale, and (3) sociocultural variables.

White prejudice toward the black is different from black prejudice toward the white. Theories which purport to explain white prejudice must be changed or modified when applied to black prejudice. Due to this racial difference in prejudice, scales designed to measure prejudice must be modified to compensate for differences in prejudice. Six scales used in this thesis were designed as if the difference in white prejudice and black prejudice are parallel, but antipodal. Statements designed to elicit a white person's prejudicial attitude are reversed to elicit a black person's prejudicial attitude. One of the scales is actually



two scales. The two scales are designed to be very similar, but are different in order to conform to known areas of white and black prejudice. The cultural differences of racial prejudice, and the lack of ability to compensate through testing techniques, make it typically impossible to make generalizations which overcome racial bias. For instance, on the basis of information available through the scales used herein it would be untenable to say that whites are more prejudiced than blacks. Statements in this thesis will be confined to those pointing to the areas in which white and black subjects differ due to participation in a common experience, "human relations training," and to those which describe the variation in the degree of prejudice which may be due to sex, marital status, age, and education.

There are two phenomena which bear mention even though they are in exception to the aforementioned limitations. One of these has to do with the range of mean scale scores of the white group in comparison to the range of mean scale scores of the black group, and the other concerns the type of scales in which the two races had high scores.

Based on the difference between the high and low mean scale scores of subjects in similar control categories, it appears that black subjects have a more stable attitude pattern than do white subjects. Table 10 shows that the dispersion of mean scale scores was greater for the white subjects in every instance. The Negro group is much more stable in

terms of its attitudes toward white, than the white group is in terms of its attitudes toward Negroes.

The two races seem to be in fairly close agreement as to what sociocultural variables have the most effect on attitudes. Dividing the two races into educational groups causes the least variation in attitude scores. Here, it should again be noted that educational differences were above the bachelor's degree. Marital status and sex are responsible for the greatest amount of variance in mean scale scores.

Table 10

Difference in High and Low Mean Scale Scores  
on Seven Scales Controlling for Race and:  
Marital Status; Sex; Age; and Education

Control Factor	Race	Scales						
		1	2	3	4	5	6	7
Age	Black	1.06	0.26	0.93	1.22	3.73	1.46	0.43
	White	5.07	1.25	2.86	4.88	14.76	14.51	5.22
Sex	Black	1.43	0.44	1.89	4.65	4.85	8.85	4.21
	White	5.94	1.54	3.20	4.72	21.81	16.35	5.51
Marital Status	Black	3.74	0.72	1.10	2.16	5.61	2.50	1.30
	White	4.74	1.08	2.92	5.32	11.21	17.72	5.70
Education	Black	0.75	0.24	0.99	1.13	1.69	2.84	0.34
	White	4.13	0.96	2.21	4.26	12.87	11.36	4.06

The mean scale scores for respondents controlling for race and sample type, and: age, sex, marital status, and education may be found in the Appendix (Tables 18-21, pages 78-81). A phenomena evident in each table is of interest. White respondents have the most favorable mean score on the behavior, experience, stereotype, anti-Negro and hypothetical situations scales in each table, while blacks have the most favorable mean score on the integration and segregation scales. Scales in which white respondents have high scores deal with experiences with people of the opposite race, stereotyping, anti-Negro attitudes, and attitudes toward blacks in hypothetical situations. Scales in which blacks have the highest score deal specifically with attitudes toward segregation and integration. Again, it must be mentioned that it is untenable, based on these scale scores, to say that blacks have better attitudes than whites, or vice versa. However, it is of interest to note that in scales of least personal threat whites have comparatively higher scores, and in scales of most personal threat, they have comparatively lower scores.

#### RACE

The first hypothesis of this thesis is that the difference between the means of the white IP and the white RS will be greater than the difference between the means of the black IP and the black RS. The implication is, that

given a common stimulus, human relations training, black and white teachers will react differently to that stimulus. Column 1 of Table 11 indicates that there is a significant difference between the IP and the RS for all comparable mean scores. It would appear that if human relations training is responsible for this variance, then it would be a highly effective tool in causing positive attitude change. However, when the samples are controlled for race the data form a different picture. Column 2 of Table 11 indicates that the mean scores of black IP are not significantly different from the mean scores of black RS on six of the seven scales. The difference between the black IP and the black RS is significant at the .05 level only on the Stereotype Scale. Column 3 of Table 11 indicates that the white IP is highly significantly different from the white RS on all seven scales.

To determine if an uneven distribution of sociocultural variables could account for any of the variance between the IP and the RS, sex, age, marital status, and education were controlled in making the same comparison. The data as indicated in Table 12 still support the observation that the difference between the white IP and the white RS is more significant than the difference between the black IP and the black RS.

In looking at the lower half of Table 12, no clear-cut patterns of variance can be seen for black respondents. The IP is significantly different from the RS in only 7 of 63 tests. The isolated instances of significance do not seem to be related to control factor or to scale.

Table 11

Difference Between Mean Scores of IP and RS  
on Seven Scales Controlling for Race\*

Scale	1. IP vs RS		2. Black IP vs Black RS		3. White IP vs White RS	
	Z	p	Z	p	Z	p
1. Previous Behavior Patterns With People of the Opposite Race Scale	5.31	.001	1.55 n.s.		6.31	.001
2. Behavior Patterns With People of the Other Race Scale	5.07	.001	0.19 n.s.		6.81	.001
3. Stereotype Scale	4.88	.001	1.99 .05		4.91	.001
4. Attitudes Toward Social Integration Scale	5.67	.001	0.29 n.s.		8.52	.001
5. Attitude Toward Segregation Scale	5.08	.001	0.73 n.s.		6.96	.001
6. Anti-Negro or White Scale	<u>a</u>	<u>a</u>	1.20 n.s.		8.17	.001
7. Attitude Toward People of the Other Race in Hypothetical Situations Scale	-4.62 <sup>b</sup>	.001	1.05 n.s.		-6.79 <sup>b</sup>	.001

\*The appropriate test of significance used here is the Z-test, two tailed, rejecting the  $H_0$  at the .05 level.

<sup>a</sup>No score is possible on this scale without controlling for race. White respondents answered the Anti-Negro Scale and black respondents answered the Anti-White Scale.

<sup>b</sup>In Scales 1, 2, 3, 4, 5, and 6, positive Z values indicate that the IP has more positive attitudes than the RS. In Scale 7, a negative Z value indicates a more positive attitude for the IP.

Table 12

Difference Between Mean Scores of IP and RS on Seven Scales Controlling  
for Race and: Age, Marital Status, Sex, and Education\*

Groups Being Compared			Scales							
			Control Factor	1 p	2 p	3 p	4 p	5 p	6 p	7 p
White IP vs White RS	Marital Status	Single	n.s.	n.s.	n.s.	n.s.	n.s.	.003	.05	
		Married	.001	.001	.001	.001	.001	.001	.001	
		Other	.001	n.s.	n.s.	.001	.001	.001	.001	
	Sex	Male	.001	.001	.002	.001	.001	.001	.001	
		Female	.001	.001	.001	.001	.001	.001	.001	
	Age	20-39	.03	.001	.005	.001	.002	.001	.001	
		40+	.001	.001	.001	.001	.001	.001	.001	
	Education	BA	.001	.001	.001	.001	.001	.001	.001	
		MA	.02	.001	.01	.001	.001	.001	.001	
	Black IP vs Black RS	Marital Status	Single	.01	.001	n.s.	n.s.	n.s.	n.s.	n.s.
			Married	.04	n.s.	.04	n.s.	n.s.	n.s.	n.s.
			Other	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Sex		Male	n.s.	n.s.	.03	n.s.	n.s.	n.s.	.02	
		Female	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	
Age		20-39	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	
		40+	n.s.	n.s.	n.s.	n.s.	.03	n.s.	n.s.	
Education		BA	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	
		MA	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	

\*The appropriate test of significance used here is the Z-test, two tailed, rejecting the Ho at the .05 level.

The white IP and white RS are significantly different, when stratified along sociocultural variables, in 56 of 63 cases. An interesting pattern emerges for the white group. The single IP and the single RS are not significantly different on 5 of the 7 scales. By consulting Table 20 (p. 80), Mean Scores for Three Different Marriage Groups Controlling for Race and Sample Type, it can be seen that single white IP have scale scores that indicate favorable attitudes on all seven scales, and they have the most favorable attitude on 3 of the 7 scales. It may be implied from these findings that this group of teachers, those that are white and single, began with comparatively favorable attitudes. The intervening variable of "human relations training" did not cause as meaningful a difference as it did for other marital status groups.

#### SCALE

The second hypothesis of this thesis is that the difference between the means of the IP and RS will be greater on the attitude scale (1), "Attitudes to Segregation," than on the experience scale (5), "Previous Behavior Patterns with People of the Opposite Race." Support for this hypothesis was found in the original work of R. N. Ford (Ford, 1941). He created the scale, "Previous Behavior Patterns with People of the Opposite Race," to indicate the experiences which white Americans have had with blacks. Ford's hypothesis was that

social experiences could be scaled. His research sustained his hypothesis and also indicated that a person's experiences and his attitudes are positively associated. Ford administered an attitude scale and his experience scale to a group of students before and after a seminar course which he felt would reduce prejudice. His finding was that attitude as measured by his attitude scale shifted when experience as measured by his experience scale remained constant. An hypothesis of this research is to determine if the same phenomenon can be observed for Houston teachers.

Table 13 is a collapsed form of Table 12, allowing Columns 1 and 5 representing the two scales of interest to fall together. Controls are made for race, and marital status, sex, age, and education, so that the actual variation in significance levels due to the type of scale can be observed.

There is no similarity between the results for the black subjects and the results for the white subjects, making it necessary to consider them separately. Looking at the black subjects first, in the lower portion of Table 13, it can be seen that little support for the hypothesis is available. There is very little variation in levels of significance due to scale. Although the IP is significantly different from the RS for 3 control factors for the attitude scale, and 2 control factors for the experience scale, support for the general operational hypothesis is untenable. Among white



Table 13

Difference Between Mean Scores of IP and RS on Two  
Scales Controlling for Race and: Age,  
Marital Status, Sex, and Education\*

Groups Being Compared	Control Factor		Scales			
			1 (Experience)		5 (Attitude)	
			Z	p	Z	p
White IP vs	Marital Status	Single	0.22	n.s.	1.05	n.s.
		Married	6.21	.001	6.26	.001
		Other	3.51	.001	4.33	.001
White RS	Sex	Male	3.49	.001	4.67	.001
		Female	5.25	.001	4.80	.001
	Age	20-39	2.18	.03	3.14	.002
		40+	6.12	.001	5.75	.001
	Education	BA	3.88	.001	1.08	.001
		MA	2.37	.02	0.46	.001
Black IP vs	Marital Status	Single	2.62	.01	0.22	n.s.
		Married	2.03	.04	0.25	n.s.
		Other	0.48	n.s.	1.15	n.s.
Black RS	Sex	Male	1.08	n.s.	1.05	n.s.
		Female	0.62	n.s.	0.82	n.s.
	Age	20-39	0.39	n.s.	1.06	n.s.
		40+	1.56	n.s.	2.17	.03
	Education	BA	0.09	n.s.	0.79	n.s.
		MA	0.94	n.s.	0.20	n.s.

\*The appropriate test of significance used here is the Z-test, two tailed, rejecting the Ho at the .05 level.

subjects, there is no variation in significance level due to scale. The IP and RS differ as much in experience as they do in attitude.

An explanation for the lack of support of the hypothesis by the data may be in the difference of research design in Ford's original work and the present thesis. Ford's research made use of a before-after situation, with a seminar serving as an independent variable (Ford, 1941). The present thesis uses a randomly selected control group. If Ford's research is correct, and change regarding race relations does take place in attitudes before experience, it would indicate that the white IP and white RS differ by more than just participation in a human relations institute. Based on Ford's research, if human relations training were the only variable separating the white IP and white RS, scores on the experience scale would not indicate as much difference as scores on the attitude scale.

The nature of institute training should also be considered as distinct from a seminar. It might, indeed, be possible that human relations training has as much influence on the experiences of white teachers as it does on their attitudes.

#### SOCIOCULTURAL VARIABLES

The third hypothesis of this thesis is based on the assumption that IP and RS stem out of parallel populations

and should show parallel results. If this assumption is true, then stratifying the two populations by the sociocultural variables of age, sex, and marital status should yield similar attitude patterns. In other words if, in the IP, women are more prejudiced than men, then, in the RS the same attitude pattern should be exhibited. It is hypothesized that the attitude pattern created by stratifying the IP by age, sex, and marital status will be similar to the attitude pattern of the RS stratified by the same variables.

#### Age

The differences between the mean scores of two age groups on seven scales controlling for race and sample type are listed in Table 14. The black IP seems to parallel the black RS since there is no divergence in results for blacks due to sample type. The results of the analysis indicate that age does not seem to be a significant variable in measuring prejudice. The young have better attitudes than the old in only 8 of the 14 cases, and this difference reaches statistical significance in only one instance.

The results for the white respondents indicate that the IP and RS are not parallel when stratified by age. In the RS the "young" have significantly better attitudes than the "old" in 5 of 7 instances. In the IP, the differences between the attitudes of the old and young are not significant. On the first two scales, the "over 40" teachers have scores

Table 14

Difference Between Mean Scores of Two Age Groups  
on Seven Scales Controlling for  
Race and Sample Type\*

Scale <sup>a</sup>	Sample Type	Race	Groups Compared	t	p	Direction <sup>b</sup>
1.	IP	Black	20-39,40+	-0.98	n.s.	-
		White	20-39,40+	-0.98	n.s.	-
	RS	Black	20-39,40+	-0.12	n.s.	-
		White	20-39,40+	1.63	n.s.	+
2.	IP	Black	20-39,40+	-1.12	n.s.	-
		White	20-39,40+	1.63	n.s.	+
	RS	Black	20-39,40+	-1.79	n.s.	-
		White	20-39,40+	-0.81	n.s.	-
3.	IP	Black	20-39,40+	1.04	n.s.	+
		White	20-39,40+	1.33	n.s.	+
	RS	Black	20-39,40+	0.84	n.s.	+
		White	20-39,40+	2.17	.05	+
4.	IP	Black	20-39,40+	2.31	.05	+
		White	20-39,40+	1.04	n.s.	+
	RS	Black	20-39,40+	0.90	n.s.	+
		White	20-39,40+	2.82	.01	+
5.	IP	Black	20-39,40+	-0.66	n.s.	-
		White	20-39,40+	1.36	n.s.	+
	RS	Black	20-39,40+	1.72	n.s.	+
		White	20-39,40+	2.99	.01	+
6.	IP	Black	20-39,40+	0.19	n.s.	+
		White	20-39,40+	1.89	n.s.	+
	RS	Black	20-39,40+	0.52	n.s.	+
		White	20-39,40+	2.02	.05	+
7.	IP	Black	20-39,40+	0.09	n.s.	-
		White	20-39,40+	-1.25	n.s.	+
	RS	Black	20-39,40+	-0.58	n.s.	+
		White	20-39,40+	-2.29	.05	+

\*The appropriate test of significance used here is the t-test, two tailed, rejecting the  $H_0$  at the .05 level.

<sup>a</sup>See Table 11, p. 52, for description of scales.

<sup>b</sup>Direction: + indicates that younger teachers have better attitudes; - indicates that older teachers have better attitudes.

which indicate better attitudes than the "under 40" teachers though the difference is not statistically significant.

### Sex

Black males have better attitudes than black females in 12 of the 14 comparisons as indicated in Table 15. Black males have significantly better attitudes than black females in 5 of these comparisons. There is no disparity in the results of the IP and of the RS. It can be concluded that the black IP and the black RS are parallel populations when stratified by sex. From these results it is also concluded that black males have more favorable attitudes than black females for this sample of Houston teachers.

The results as stratified by sex were mixed for the white subjects. White males have better attitudes in about half of the instances, and the white females have better attitudes in about half of the instances. The males have significantly better attitudes in 3 of the 14 comparisons, and females have significantly better attitudes in 4 of the comparisons. The comparisons in which females have significantly better attitudes are within the RS. The comparisons in which males have significantly better attitudes are within the IP. It can be concluded that the white IP and the white RS are not parallel. The mixed nature of the results allows no conclusions concerning the relation of sex to the prejudicial attitudes of white teachers.

Table 15

Difference Between Mean Scores of Males and Females on  
Seven Scales Controlling for Race and Sample Type\*

Scale <sup>a</sup>	Sample Type	Race	Groups Compared	t	p	Direction <sup>b</sup>
1.	IP	Black	M,F	0.59	n.s.	+
		White	M,F	0.86	n.s.	+
	RS	Black	M,F	-1.31	n.s.	-
		White	M,F	0.86	n.s.	+
2.	IP	Black	M,F	0.67	n.s.	+
		White	M,F	2.51	.02	+
	RS	Black	M,F	-0.26	n.s.	-
		White	M,F	-4.52	.01	-
3.	IP	Black	M,F	2.21	.05	+
		White	M,F	-1.30	n.s.	-
	RS	Black	M,F	0.89	n.s.	+
		White	M,F	-1.76	n.s.	-
4.	IP	Black	M,F	1.34	n.s.	+
		White	M,F	1.50	n.s.	+
	RS	Black	M,F	5.01	.01	+
		White	M,F	-4.98	.01	-
5.	IP	Black	M,F	0.74	n.s.	+
		White	M,F	2.06	.04	+
	RS	Black	M,F	1.90	.06	+
		White	M,F	-1.76	n.s.	-
6.	IP	Black	M,F	0.73	n.s.	+
		White	M,F	2.20	.05	+
	RS	Black	M,F	3.01	.01	+
		White	M,F	-2.78	.02	-
7.	IP	Black	M,F	-0.48	n.s.	+
		White	M,F	-1.35	n.s.	+
	RS	Black	M,F	-5.04	.01	+
		White	M,F	3.01	.01	-

\*The appropriate test of significance is the t-test, two tailed, rejecting the  $H_0$  at the .05 level.

<sup>a</sup>See Table 11, p. 52, for description of scales.

<sup>b</sup>Direction: + indicates that males have a better attitude: - indicates that females have a better attitude.

### Marital Status

Controlling for marital status does not have near the importance for blacks that it has for whites. The marital groups for the blacks differ significantly in only one area. This can be noted from Table 16. There is no disparity between the results of the IP and the results of the RS, and again it can be concluded that the black IP and RS are parallel groups.

The results for the white subjects indicate that single subjects in the RS had significantly better attitudes than any other marital status group. The single RS subjects had better attitudes in 5 of the 7 comparisons. The single subjects in the IP also had better attitudes in most of the comparisons, but the difference never achieved statistical significance. The results indicate that the basic rank order of marital status group by favorableness of attitude is the same for the IP and RS. In each, the single have the most favorable attitudes, and "others" (those who have been widowed or divorced) have the least favorable attitudes. The IP and RS differ only in the magnitude of difference between the marital status groups.

It is interesting to note that there is only one scale in which all marital status groups are not represented as having the most favorable attitude. In scale 3, the stereotype scale, the "other" marital status group is not represented in either the white or black group as having the

Table 16

Difference Between Mean Scores of Three Marital Groups  
on Seven Scales Controlling for Race and Sample Type\*

Scale <sup>a</sup>	Sample Type	Race	Groups Compared	t	p	Direction <sup>b</sup>
1.	IP	Black	S, O <sup>d</sup>	-0.78	n.s.	x
			S, M <sup>e</sup>	-1.94	n.s.	-
			M, O	1.13	n.s.	-
		White	S, O	-0.51	n.s.	x
			S, M	-0.26	n.s.	-
			M, O	-0.52	n.s.	x
	RS	Black	S, O	1.40	n.s.	+
			S, M	0.69	n.s.	+
			M, O	1.34	n.s.	-
		White	S, O	1.87	n.s.	+
			S, M	2.49	.05	+
			M, O	-0.25	n.s.	x
2.	IP	Black	S, O	-1.21	n.s.	x
			S, M	-1.67	n.s.	-
			M, O	0.40	n.s.	-
		White	S, O	0.11	n.s.	+
			S, M	-0.95	n.s.	-
			M, O	1.09	n.s.	-
	RS	Black	S, O	0.28	n.s.	+
			S, M	0.76	n.s.	+
			M, O	-0.56	n.s.	x
		White	S, O	1.22	n.s.	+
			S, M	-0.42	n.s.	-
			M, O	0.76	n.s.	-
3.	IP	Black	S, O	0.91	n.s.	+
			S, M	-0.05	n.s.	-
			M, O	2.11	.05	-
		White	S, O	1.03	n.s.	+
			S, M	0.36	n.s.	+
			M, O	0.95	n.s.	-
	RS	Black	S, O	0.29	n.s.	+
			S, M	0.17	n.s.	+
			M, O	0.31	n.s.	-
		White	S, O	1.33	n.s.	+
			S, M	1.46	n.s.	+
			M, O	0.40	n.s.	-



Table 16 (continued)

Scale <sup>a</sup>	Sample Type	Race	Groups Compared	t	p	Direction <sup>b</sup>
4.	IP	Black	S, O	0.30	n.s.	+
			S, M	-0.56	n.s.	-
			M, O	1.31	n.s.	-
		White	S, O	0.09	n.s.	+
			S, M	0.36	n.s.	+
			M, O	-0.35	n.s.	x
	RS	Black	S, O	0.92	n.s.	+
			S, M	1.44	n.s.	+
			M, O	-0.39	n.s.	x
		White	S, O	2.59	.02	+
			S, M	2.26	.05	+
			M, O	1.06	n.s.	-
5.	IP	Black	S, O	0.17	n.s.	+
			S, M	-0.41	n.s.	-
			M, O	0.76	n.s.	-
		White	S, O	-0.11	n.s.	x
			S, M	-0.02	n.s.	-
			M, O	-0.19	n.s.	x
	RS	Black	S, O	1.10	n.s.	+
			S, M	-0.23	n.s.	-
			M, O	1.95	n.s.	-
		White	S, O	1.96	n.s.	+
			S, M	2.33	.05	+
			M, O	0.08	n.s.	x
6.	IP	Black	S, O	-0.06	n.s.	x
			S, M	0.20	n.s.	+
			M, O	0.40	n.s.	x
		White	S, O	1.33	n.s.	+
			S, M	1.12	n.s.	+
			M, O	0.37	n.s.	x
	RS	Black	S, O	-0.21	n.s.	x
			S, M	1.14	n.s.	+
			M, O	-1.72	n.s.	x
		White	S, O	2.21	.05	+
			S, M	1.59	n.s.	+
			M, O	1.12	n.s.	-

most favorable attitude. The results indicate that there is some relation in being divorced or widowed and stereotyping. Robin Williams points out that the even "greater likelihood of prejudice among persons who are separated, widowed, or divorced might well be a function of frustration or personality difficulty associated with the loss of the marital partner as well as lessor social cohesion" (Williams, 1964). The supposed failure in an important aspect of life might cause a person to withdraw and accept the norms or stereotypes of his group rather than risking a personal decision which might bring him into conflict with his peers.

### Education

The control for education was included because there were more IP with master's degrees than RS with master's degrees. The intent was to determine if there was a difference in attitude between the subjects who had the bachelor's degree and subjects who had the master's degree. The results of the analysis indicate that there is very little difference in attitude due to education above the bachelor's degree.

White subjects with the master's degree generally indicated more favorable attitudes than white subjects with the bachelor's degree. The difference in scores never reached statistical significance for the white sample in either the IP or the RS.

Black subjects with the master's degree showed more favorable attitudes than black subjects with the bachelor's degree in 8 of 14 comparisons. The difference was significant in two of the comparisons. Both of the instances in which the difference was significant were in the IP. One indicated that subjects with the bachelor's degree had better attitudes and the other indicated that subjects with the master's degree had better attitudes.

Table 17 shows that for the whites there is a tendency for those with the master's degree to have slightly better attitudes, even though the difference is not significant. The conclusion from these results would have to be that there is a slight but insignificant difference between the attitudes of white teachers who have the master's degree and white teachers who have the bachelor's degree.

Based on the mixed direction, and conflicting levels of significance for t values, as recorded in Table 17, the conclusion concerning black subjects is that there is no overall pattern of difference in attitude due to having the bachelor's or the master's degree.

Table 17

Difference Between Mean Scores of Two Educational Groups  
on Seven Scales Controlling for Race and Sample Type\*

Scale <sup>a</sup>	Sample Type	Race	Groups Compared	t	p	Direction <sup>b</sup>
1.	IP	Black	BA-BS,MA-MS	-0.71	n.s.	+
		White	BA-BS,MA-MS	-0.02	n.s.	+
	RS	Black	BA-BS,MA-MS	-0.08	n.s.	+
		White	BA-BS,MA-MS	-1.02	n.s.	+
2.	IP	Black	BA-BS,MA-MS	-1.20	n.s.	+
		White	BA-BS,MA-MS	-0.01	n.s.	+
	RS	Black	BA-BS,MA-MS	-0.09	n.s.	+
		White	BA-BS,MA-MS	-0.60	n.s.	+
3.	IP	Black	BA-BS,MA-MS	0.97	n.s.	-
		White	BA-BS,MA-MS	-0.64	n.s.	+
	RS	Black	BA-BS,MA-MS	1.00	n.s.	-
		White	BA-BS,MA-MS	0.38	n.s.	-
4.	IP	Black	BA-BS,MA-MS	2.08	.02	-
		White	BA-BS,MA-MS	-1.28	n.s.	+
	RS	Black	BA-BS,MA-MS	-0.48	n.s.	+
		White	BA-BS,MA-MS	-0.12	n.s.	+
5.	IP	Black	BA-BS,MA-MS	-0.76	n.s.	+
		White	BA-BS,MA-MS	-1.59	n.s.	+
	RS	Black	BA-BS,MA-MS	0.21	n.s.	-
		White	BA-BS,MA-MS	-0.34	n.s.	+
6.	IP	Black	BA-BS,MA-MS	-1.75	.05	+
		White	BA-BS,MA-MS	-0.24	n.s.	+
	RS	Black	BA-BS,MA-MS	-0.78	n.s.	+
		White	BA-BS,MA-MS	-0.63	n.s.	+
7.	IP	Black	BA-BS,MA-MS	-0.38	n.s.	-
		White	BA-BS,MA-MS	1.28	n.s.	+
	RS	Black	BA-BS,MA-MS	-0.16	n.s.	-
		White	BA-BS,MA-MS	0.67	n.s.	+

\*The appropriate test of significance is the t-test, two tailed, rejecting the  $H_0$  at the .05 level.

<sup>a</sup>See Table 11, p. 52, for description of scales.

<sup>b</sup>Direction: + indicates that teachers having a master's degree have better attitudes: - indicates that teachers having a bachelor's degree have better attitudes.

## Chapter 5

### SUMMARY AND CONCLUSIONS

It was the purpose of this study to compare the attitudes of a group of teachers who participated in Human Relations Institutes with the attitudes of a random sample of teachers from the same schools who did not participate in the Institutes (1) to determine if black teachers profitted as much (as indicated by positive attitude difference) from the Human Relations Institutes as did white teachers, (2) to test whether experience will remain constant while attitude changes, and (3) to see if the direction and degree of difference in attitude stratified by age, marital status, and sex is the same for participants and non-participants in the Human Relations Institutes.

The Research Center at Houston Baptist College is presently engaged in a three-year project entitled "The Mental Health of Teachers and School Desegregation." A portion of this research project is to evaluate the Human Relations Institutes which were a part of a project sponsored by Texas Southern University. The data gained by the Research Center at Houston Baptist College concerning these Human Relations Institutes have been computerized, and are readily available to study the problem of interest to this thesis.

The study is limited in the comparability of the two samples. The institute participants (IP) were volunteers while the non-participants (RS) were randomly selected. This limitation is lessened somewhat by the fact that the random sample was drawn from the schools of the institute participants. The two groups when compared by  $\chi^2$  as a measure of "goodness of fit" showed no significant differences in many areas. Two areas in which there are significant differences are sex and educational achievement. These variables were controlled in making comparisons to insure that the results would be as accurate as possible. The sample limitation was further alleviated by the statistical treatment of the two samples.

The study is limited further in that the participants from more than one institute had to be pooled in order to have an N large enough for statistical analysis. The institutes were a part of a common project, and were common project and were comparable in form, content and administration.

The present study is also limited in that it assumes that the responses of subjects on standardized questionnaires are measures of their actual attitudes.

A review of the literature pointed out the need for studies dealing with Human Relation Institutes, especially those controlling for race. The South has been pointed out as having a desegregation problem, and therefore as being a

likely place for the study of attitudes concerning desegregation. Research has not established a firm base for generalization regarding the relation of prejudice to age, sex and marital status. It has been established in the literature that attitudes, though hard to change, are most influenced by an increase in self-insight. A person must become aware of areas within himself that he would like to change, before he can be changed. Human Relations Institutes have been successful in making participants more sensitive to themselves and thus more sensitive to others. The hypothesis that a reduction in prejudice can be brought about by increased self acceptance caused by human relations training has been accepted.

The present research is needed to determine the effect of the Houston Human Relations Institutes on Houston teachers. It will also seek to provide information concerning the effect of human relations training on black and white teachers. In addition, the effects of the institutes will be measured using scales which are established in the literature as being adequate indicators of prejudice.

Subjects for this study consisted of an experimental group of institute participants and a random group. There were 203 teachers who were IP subjects and 262 RS subjects who were teachers drawn at random from the same schools as the IP subjects. From the total of both IP and RS subjects, 350 usable questionnaires were obtained.

The data of interest to this thesis were gained through the use of a standardized questionnaire. This instrument was constructed by the investigators at the Research Center using some original scales and borrowing some scales from previous research. The questionnaire was designed to gain information concerning various sociocultural variables. It contained scales which elicited information concerning attitudes and opinions on different areas of race relations. This thesis is interested in the scores of the respondents on seven scales, as revised, in "Measurement of Interracial and Community Attitudes of Houston Teachers: Eleven Scales" by Crittenden, Roff, and Robinson. Information gained concerning sociocultural variables were used for controls in determining relationships between independent and dependent variables.

The scales in the present thesis included an experience scale, developed by Ford, to indicate the experiences which white Americans have had with Negroes. A behavior scale originating with Rosander was intended to be a scale which reflected actual behavior. The same scale which Robin Williams used in the Cornell studies was used by the Houston investigators to measure stereotypic attitudes. An integration scale was devised by the director of the Research Center to survey certain aspects of social integration, and a scale, developed by Rosenbaum and Zemmerman was intended to reflect a person's attitude toward segregation.



B. Steckler devised two scales, the "Anti-Negro" and "Anti-white" scales. The Houston investigators gave the Anti-white scale to Negro respondents, and the Anti-Negro scale to white respondents. The last scale used in this research was constructed by Frank R. Westie and is assumed to serve as a good predictor of a person's racial attitudes toward situations which he could easily come in contact.

The teachers who were selected to participate in the study were mailed letters explaining that they had been chosen to participate in an important study in education. They were either interviewed in groups on the Houston Baptist College campus, or were handed the questionnaire personally by their principals.

Raw score data profiles were tabulated for the two groups and analyzed statistically by computer. When testing for significance of difference between the IP and RS, it is recognized that the IP group constitutes a known population which might be described as "All those who have volunteered for institute training during 1967 and 1968." They do not constitute a probability sample, but a population for which the parameters  $m$  and  $\sigma$  are known. The RS group, however, does meet the criteria for a probability sample and, hence, the question submitted for testing is not whether both groups could have come from a common population, but if the mean of the RS sample could, by chance alone, have come from the IP population mean. The test of preference would thus be:  

$$Z = \frac{\bar{X} - m/\sigma}{\bar{x}}$$
 When testing for significance of difference

for variables within the IP, or within the RS, the t-test for significance of difference between two groups was used.

The first hypothesis of this thesis is that the difference between the means of the white IP and the white RS will be greater than the difference between the means of the black IP and the black RS. The implication if this hypothesis is accepted will be that given a common stimulus, human relations training, black and white teachers would react differently to that stimulus. This hypothesis about the population mean will be rejected if the value of Z obtained would occur by chance only 5 times or less in 100, when the hypothesis is true.

The second hypothesis of this thesis is that the difference between the means of the IP and RS will be greater on the attitude scale "Attitudes to Segregation," than on the experience scale "Previous Behavior Patterns with People of the Opposite Race." The same confidence limits as above will be used.

The third hypothesis of this thesis is based on the assumption that IP and RS are parallel populations. If this assumption is true, then stratifying the two populations by the sociocultural variables of age, sex, and marital status should yield similar attitude patterns. It is hypothesized that the attitude pattern created by stratifying the IP by age, sex, and marital status will be similar to the attitude pattern of the RS stratified by age, sex, and marital status.

The t-test of significance between two groups will be used to test this hypothesis.

To determine if education above the bachelor's had any effect on attitudes concerning race, the following hypothesis was tested: that there is no difference in mean scores of the participants who have the master's degree and the mean scores of the participants who have only the bachelor's degree in the IP or the RS on any of the scales used in this study.

The three different hypotheses of this thesis were related in a cumulative manner. That is to say that confirmation of the hypothesis concerning the parallelness of the IP and RS would allow more generalization as to why the first hypothesis was accepted. If there was a greater difference between the white IP and the white RS than between the black IP and black RS, a reason must be posited. If the IP and RS, controlling for race, given parallel results it would have implied that the human relations institutions were an important variable.

The results of the analysis do not provide conclusive evidence concerning the relation of prejudice to human relations training. Since the hypotheses were stated in such a way that confirmation of the second two hypotheses would support to interpretation of the first, lack of confirmation makes the relation of prejudice to human relations training somewhat unclear.

A dominant finding of the analysis is the independence of the black and white subjects. Control for race is a most important variable. No generalization can be attempted which does not specify a particular group by race.

The first hypothesis was accepted with a great deal of confidence, and it can be stated that there is a greater likelihood that the black RS could, by chance alone have come from the black IP, than that the white RS could, by chance alone have come from the white IP. Due to subsequent rejection of the second and third hypotheses by the white subjects, the reason for this phenomena has to do with the initial differences of the two groups rather than with their mutual experience. It is concluded that there is a wide range of prejudicial attitudes among whites, and that those who tend to volunteer for human relations training tend to be those with more favorable attitudes. There is less dispersion among the mean scale scores of blacks indicating a greater commonality of attitude. The black group yielded partial confirmation to the second and third hypotheses making it somewhat tenable to suggest that had there been difference between the black IP and black RS it could have been accredited to human relations training.

The results of the analysis indicate that the attitude scale number (1) "Attitude Toward Segregation," and the experience scale number (5) "Previous Behavior Patterns with People of the Opposite Race," measure either

the same phenomena, or the two phenomenons are affected in the same way by human relations training. There was slight but untenable confirmation of the hypothesis by the black group, and complete rejection of the hypothesis by the white group.

Among the white subjects, no support can be found for the third hypothesis. The IP and RS yield different and often conflicting results suggesting that they are not parallel populations. The mixed nature of their results make it impossible to generalize as to the relation of age and sex to prejudice. It can be said that among the white subjects the single have more favorable attitudes than any other marital status group, and that those subjects who have the master's degree have insignificantly better attitudes than subjects having only the bachelor's degree.

Among the black subjects, the IP and RS are parallel populations. Age and marital status are not significant variables when measuring prejudice in this sample of black teachers. Sex, however, is a significant variable with men exhibiting more favorable attitudes than women.

# APPENDIX

Table 18

Mean Scale Scores for Different Age Groups  
Controlling for Race and Sample Type

Sample Type	Race	Age	Scales						
			1	2	3	4	5	6	7
I P n a s r t t i i t c u i t p e a n t	B	20-39 N=44	44.52	8.44	17.61	24.11	94.61	55.14	11.50
		40+ N=45	45.40	8.65	17.13	22.89	96.00	54.82	11.44
	W	20-39 N=31	48.77	8.73	18.06	23.23	91.55	59.16	10.16
		40+ N=28	49.89	8.38	17.32	22.36	87.92	53.82	11.50
R N a o n n d p o a m r t S i a c m i p p l a e n t	B	20-39 N=68	44.34	8.45	17.09	23.66	95.88	54.43	11.07
		40+ N=44	44.43	8.70	16.68	23.14	92.27	53.68	11.39
	W	20-39 N=38	46.82	7.89	16.82	20.71	85.18	49.68	12.89
		40+ N=40	44.82	9.63	15.20	18.35	76.79	44.65	15.38

Table 19

Mean Scale Scores for Males and Females Controlling  
for Race and Sample Type

Sample Type	Race	Sex	1	2	3	Scales 4	5	6	7
I P n a s r t t i i t c u i t p e a n t	B l a c k	Male N=36	45.28	8.64	18.00	23.97	96.11	55.72	11.31
		Female N=55	44.75	8.51	17.04	23.25	94.58	54.47	11.58
	W h i t e	Male N=12	50.33	8.98	17.53	23.92	95.67	62.08	9.42
		Female N=49	49.06	8.46	13.33	22.57	88.68	54.86	11.02
R N a o n n d p o a m r t S i a c m i p p l a e n t	B l a c k	Male N=19	44.32	8.64	16.74	23.94	98.53	52.89	9.79
		Female N=55	45.75	8.95	16.11	19.32	93.68	46.87	14.00
	W h i t e	Male N=15	45.60	7.44	15.13	19.20	74.86	45.73	14.93
		Female N=93	44.39	8.53	16.97	23.40	81.68	54.39	11.48

Table 20

Mean Scale Scores for Three Different Marriage Groups  
Controlling for Race and Sample Type

Sample Type	Race	Marital Status	1	2	3	Scales 4	5	6	7
I P n a s r t t i i t c u i t p e a n t	B l a c k	Married N=74	45.41	8.62	17.55	23.73	95.67	54.85	11.42
		Single N=6	41.83	7.97	17.50	23.00	93.83	55.50	11.00
		Other N=11	43.64	8.51	16.45	22.55	92.91	55.73	12.09
	W h i t e	Married N=34	49.21	8.69	17.82	22.68	89.97	55.94	10.97
		Single N=8	48.62	8.40	18.12	23.12	89.88	61.12	9.50
		Other N=19	49.79	8.36	17.26	23.00	90.47	54.84	10.74
R N a o n n d p o a m r t S i a c m i p p l a e n t	B l a c k	Married N=86	44.53	8.52	16.94	23.31	95.38	53.56	11.27
		Single N=7	45.57	8.69	17.14	24.71	94.57	55.71	11.43
		Other N=19	43.21	8.62	16.79	23.63	90.06	56.16	10.79
	W h i t e	Married N=62	45.05	8.91	15.77	18.98	79.26	46.10	14.56
		Single N=14	48.93	8.31	17.14	21.79	86.93	51.57	11.64
		Other N=10	45.40	7.83	15.30	17.80	79.50	43.40	15.20



Table 21

Mean Scale Scores for Different Educational Groups  
Controlling for Race and Sample Type

Sample Type	Race	Ed.	1	2	3	Scales 4	5	6	7
I P n a s r t t i i t c u i t p e a n t	B l a c k	BA,BS N=31	44.52	8.40	17.71	24.32	94.07	53.13	11.32
		MA,MS N=60	45.18	8.64	17.27	23.13	95.76	55.97	11.55
	W h i t e	BA,BS N=38	49.32	8.59	17.58	22.47	88.63	56.50	11.08
		MA,MS N=21	49.33	8.60	17.90	23.48	92.80	57.14	9.71
R N a o n n d p o a m r t S i a c m i p p l a e n t	B l a c k	BA,BS N=51	44.43	8.54	17.22	23.29	94.64	53.72	11.18
		MA,MS N=57	44.49	8.55	16.72	23.58	94.20	54.88	11.26
	W h i t e	BA,BS N=59	45.20	7.65	16.02	19.22	79.93	45.78	11.47
		MA,MS N=26	46.46	7.80	15.69	19.23	81.04	47.42	13.77

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