

A MEASUREMENT OF RACIAL ATTITUDES OF OKLAHOMA
AGRICULTURAL AND MECHANICAL COLLEGE STUDENTS

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By

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CHAPTER I

INTRODUCTION

Among the significant developments in the fields of sociology and social psychology during the past two decades has been the rapid increase of interest in the different phases of the relationship between the Negro and white races. One of the most important reasons for this increased interest has been the migration of large numbers of Negroes to the northern industrial cities during the World War and post-war boom period. Formerly, the problems of the relationship between the races had been largely sectional in scope but now they have achieved nationwide significance, due to the diffusion of the Negro population throughout the country.

Another significant trend in the fields of social psychology and sociology has been that of the development of techniques of measurement of attitudes. Many applications of these techniques have been made with racial attitudes because of their increasing prominence and significance.

The Concept of Attitudes

One of the most widely used concepts in contemporary American social psychology is no doubt that of attitudes. This concept developed to fill the need "to express in concrete terms the mechanisms through which culture is carried." ^{1/} It developed at the time when the instinct theory was being seriously attacked. The newer concept readily achieved acceptance in place of the old instinct theory since it filled the need for some explanation of social motivation that would be elastic enough to

^{1/} Gordon Allport, "Attitudes", Handbook of Social Psychology, edited by Carl Murchison, p. 801. This article presents an excellent summary of the development and present uses of the concept.

allow for cultural variability, yet would avoid the impersonal and meta-physical implications of the social forces concept.

Since 1918 the concept of attitudes has become the focal point in social psychology. Several writers in the field go as far as to contend that social psychology is actually no more than a study of the nature and formation of attitudes. This was the position taken by Thomas and Znaniecki in their study of Polish peasants. They define attitude as "a process of individual consciousness which determines real or possible activity of the individual counterpart of the social value; activity, in whatever form, is the bond between them."^{2/} The value is the objective and the attitude is the subjective phase of this dichotomy. Usually, values are social in nature, therefore having "an empirical content accessible to the members of some group..."^{3/} It is attitudes toward these values that are of interest to social psychologists and sociologists. Attitudes focusing on the same value may be quite divergent.

Faris ^{4/} carries this viewpoint further in his analysis of the concept. He points out four dichotomies in attitudes: Hereditary and acquired, conscious and unconscious, group and individual, and latent and kinetic. This is a somewhat broader interpretation than the original concept and emphasizes the subjective nature of attitudes which are "tendencies toward modes of action and do not have any one-to-one correspondence to specific responses to stimulations."^{5/}

In emphasizing the subjectivity of attitudes, Faris holds that neither

^{2/} The Polish Peasant in Europe and America, p. 27.

^{3/} Ibid., p. 21.

^{4/} The Nature of Human Nature, pp. 127-154.

^{5/} Ibid., p. 141.

opinions nor other overt behavior necessarily reveal the "real" attitude which is the object of research. In both cases the individual's reactions are determined by the residue of past experiences and the total existing situation. The residue of past experiences involves many attitudes; hence, the particular ones responsible for particular acts cannot be determined.

Although Faris's analysis of the concept has been very stimulating to social psychologists and sociologists it does not lend itself to quantitative research. It has, however, been of great value in developing a wide interest in the subject which has led to much worthwhile research.

Faris has, moreover, focused attention on one of the most vital problems in the field of attitude study. It has yet to be shown to what extent opinions are indicative of other types of overt behavior. The present study is not concerned with the determination of this relationship but the limitations of our present knowledge should be kept in mind, lest it be assumed that the attitude scale scores bear a one-to-one relationship with other forms of overt behavior.

The concept developed by Faris does not lend itself to quantitative research because it is impossible to measure these underlying tendencies with present techniques. It seems practical, therefore, to define the attitude in terms of the opinion. Such a definition might be considered to be operationally determined for it is arrived at in the process of finding out opinions. As a result, the concept would have the advantage of clarity and objectivity. Murphy, Murphy, and Newcomb say: "...we shall regard attitudes, in conformity with general usage in their experimental literature, as verbalized or verbalizable tendencies, dispositions, or adjustments toward certain acts." ^{6/} This is the definition that will be used in the present study.

^{6/} Experimental Social Psychology, p. 339.

Measurement of Attitudes

Almost simultaneously with the beginnings of the concept of attitudes in American social psychology and sociology came attempts to measure attitudes toward several basic issues. At first it was thought to be a simple matter to measure attitudes by drawing up a few questions and obtaining the reactions to them of different groups. Such attempts were somewhat naive and subjective for only one or two individuals were called upon to judge whether the question actually called forth the attitude under consideration. The items usually were in the form of questions such as "Would you join the army in case of American entrance into an European war?" Such studies merely gave a census of opinions on particular issues. No attempt was made to quantify reactions to different questions or to determine the validity and reliability of the tests. As scales of measurement they lacked interchangeability of units since the questions did not represent an attitude continuum; neither were they weighted on the basis of the importance of the contribution of each to the measurement of the attitude.

The next development in the measurement of attitudes was the a priori scales. These scales were not constructed on the basis of empirical data but rather in terms of logical considerations; hence, the method of scoring was purely arbitrary. It included the use of alternative answers with arbitrarily assigned values and assumed that the answers were on a single continuum and the distances between consecutive answers were equal. This type of scale is well illustrated by the social distance scale devised by Bogardus.^{7/} The subject is asked to rank the alternatives according

^{7/} Immigration and Race Attitudes. See also "Measuring Social Distance", Sociology and Social Research, Vol. IX, pp. 299-308, 1925.

to his preference. The difference between ranks is assumed to be the same throughout the scale. In the social distance scale, the subjects are asked to check the degree of intimacy which they would tolerate between themselves and members of various races. The degrees of intimacy have arbitrarily assigned numerical values. Some students have questioned whether or not this is a real scale since there is no proof that the assigned values are accurate representations of the empirical comparative values. ^{8/} Certainly in the early work of Bogardus little attempt was made to standardize the scale values in this respect. Even from the logical standpoint, the measurement is weak since items of high value may often exclude the alternatives of lower values. For example, a subject might rather have a Negro on his street as a neighbor ^{9/} than in his occupation as a competitor. In such a case the subject's score would be an inaccurate indication of his actual attitude.

The greatest advancements in the technique of attitude measurement have been made by Thurstone and his students ^{10/} in that they overcame the limitations of the scale by Bogardus. His method is an adaptation from psychophysics, by which the individual's ability to note large and

^{8/} Murphy, Murphy, and Newcomb, *Op. cit.*, pp. 877-900. They point out that although the steps of the scale may not be actually equal intervals as Bogardus assumed, it does give a high correlation with applications of Thurstone's paired comparison method.

^{9/} The individual is asked to choose one as representing the extent of social distance.

<u>Value</u>	<u>Alternative</u>
1)	to close kinship by marriage
2)	to my club as personal chums
3)	to my street as neighbors
4)	to employment in my occupation in my country
5)	to citizenship in my country
6)	as visitors only to my country
7)	would exclude from my country

^{10/} "Theory of Attitude Measurement", *Psychological Review*, Vol. 36, pp. 222-241, 1929. See also "The Method of Paired Comparisons for Social Values", *Journal of Abnormal and Social Psychology*, Vol. 21, pp. 384-400, 1927. The Measurement of Attitude.

small differences is measured. For example, most subjects can discriminate between lights of ten and thirty candle power; fewer can make such distinctions between those of fifteen and twenty-five candle power, and so on until a point is reached where the judgments will not be more than fifty percent accurate. Instead of various lights, Thurstone gave statements concerning a given attitude to several hundred judges, chosen for their reputation of objectivity. Thurstone reasoned that the linear distance between two statements is in direct proportion to the percentage of judges who discriminate between them. The absolute difference is neither known nor relative to the validity. Such a method indicates objectively the mathematical relationship between any two differences on the scale. This is parallel to the development of operationally determined scales in physics in which measurement must be related to the scale used in the determination of the differences.

The actual technique for the scaling of attitude statements is a modification of this paired comparisons method. A collection of statements ranging from extreme hostility to extreme favorableness are classified into eleven groups by many judges, who are instructed to place the statements in piles according to equal appearing intervals. Each group is given a numerical value from one to eleven, the first group is considered most favorable, the sixth neutral, and the eleventh the most hostile. Statements which have a high inter-quartile range--i.e. those which call forth a wide divergence of judgments--are thrown out for "ambiguity". The value of the remaining statements is determined by taking the median positions given them by the judges.

Whereas this method of scale construction overcomes the two principle limitations of Bogardus' social distance scale--lack of both uniform linear distances and necessary inclusion of lower scores in the

higher scores--it does have two other limitations. First, there may be attitudes where the "objective" discrimination of the judges will not be applicable to other groups. That is, the judging may have been subjected to social norms not comparable to the norms of other groups. Hence, statements that the judges deem discriminatory will not register differences for other groups. The second limitation is the time and expense required to construct the scales since much effort must be expended in sorting the statements by value groups.

To overcome these two limitations, Lickert and others have utilized a method of scale construction called the criterion of internal consistency or critical ratio method. In place of the use of judges as in Thurstone's method statistical techniques are applied to the results of a preliminary survey of opinions to test the discriminatory power of each item. This method assumes that items can be selected "measuring a single common variable as shown by the ability of the items to differentiate between extremes of a distribution based on total scores" and "...that the items in the scale are distributed normally in the population. The use of this method involves the following steps: (1) A total score is calculated for each person taking the test. (2) Papers are placed in rank order on the basis of total score. (3) Equal segments at the extremes of the distribution are chosen. (4) Percentage differences between these segments are calculated for each item. (5) The statistical significance of the difference is determined for each item (critical ratio). (6) Items with largest significant differences are said to have greater discriminating power and are retained for the final scale." ^{11/}

^{11/} W. H. Sewell, The Construction and Standardization of a Scale for the Measurement of Oklahoma Farm Socio-Economic Status, p. 48, unpublished Ph. D. thesis, University of Minnesota, 1939.

Although this technique of measuring attitudes overcomes the two major limitations pointed out in the discussion of Thurstone's work, there is little logical foundation for the critical ratio method. Judging the discriminating power of each item solely on the basis of high and low groups according to total score is open to question because the total score has never been proven to be a valid indicator. Also, the other assumption—normal distribution of items throughout the population has been seriously questioned by Allport. ^{12/} Even though there is some doubt as to the logical validity of these two assumptions pragmatically the critical ratio method is comparable to Thurstone's. When scales for measuring the same variable are constructed by the two methods they give intercorrelation coefficients of 0.89 and higher. Also the median reliability on Lickert's method was higher than Thurstone's. ^{13/}

Usually each item has several possible responses ranging from strong approval to strong disapproval. Therefore, each item is a scale in itself. Assuming that the responses are normally distributed throughout the population the sigma method of scoring the retained items may be used. The value for each response is determined by first calculating the percentage of the subjects checking it and then by calculating the sigma distance that this percentage is from the mean of a normal distribution curve. In this method, then, the actual value of each response is determined by the subjects themselves; hence, it is more applicable to groups outside the classroom where differences between the discriminatory qualities of the statements may occur.

A further simplification of this method is that of assigning whole

^{12/} "The Measurement and Motivation of Atypical Opinion in a Certain Group", American Political Science Review, Vol. XIX, p. 735, 1925. See also Joseph K. Folsom, Social Psychology, p. 545.

^{13/} Murphy, Murphy, and Newcomb, Op. cit., p. 905.

numbers to the various responses to correspond with the sigma values. This method of scoring gives practically the same reliability coefficients and the coefficient of correlation between the two scorings is very high ($r = 0.995$ in some cases). This method has two distinct advantages over the sigma scoring. First, it is shorter and easier, taking less time to score the tests. Second, it makes it possible to combine the three-point and five-point statements in the total score.

Even though this method appears to be the most accurate of any yet developed there are several factors that should be considered before applications are made. First, no attitude test is valid unless given under favorable conditions. The subjects must have confidence in both the scale and in the person giving it. Otherwise they may tend to be dishonest or to give rationalizations of the attitudes they usually hold. Second, much research remains to be done before exact relationships between expressed attitudes and other overt behavior may be determined. It may be that the scales will have to be altered considerably to be accurately indicative of overt behavior under actual social situations. Also, it may be that in certain situations stimulations may come so rapidly that the attitudes will change sufficiently to render prediction subject to large errors.

Review of Literature

Many opinion studies were made in the early twenties but since they were merely of the census type described in the previous section, some of their results only will be reviewed here. Suffice it to say that the results were not any better than the techniques used to attain them.

Bogardus ^{14/} asked 248 graduate and upper division students to

14/ "Social Distance and Its Origins", Journal of Applied Sociology, Vol. IX, pp. 216-226. Referred to by E. B. Bolton, "Effect of Knowledge Upon Attitudes Toward the Negro", Journal of Social Psychology, Vol. VI, pp. 68-90.

classify 36 racial and language groups according to their feelings toward them. This was done to find how the attitudes vary toward the different groups. The greatest number of students expressed antipathy towards the Turk, the second greatest number towards the Negro, and the third, towards the mulatto. No attempt was made to find any sociological variables having relationship with the choice made.

Katz and Allport ^{15/} making a similar study of 3,408 Syracuse University students to determine the relative exclusiveness of fraternity and non-fraternity groups used a census type of measurement. The fraternity members were asked if they would admit to fraternity membership and non-fraternity students were asked if they would admit to rooming house, as room-mates thirty different racial and language groups. In both student groups the Negro had the lowest percentage of affirmative opinions. Only 5 percent of the total sample (including Negro students) would admit Negroes. This prejudice was nearly uniformly distributed through the different groups. Hence, the writers conclude that the relative social distances to these groups are stable and constant throughout the entire culture pattern.

Bogardus ^{16/} in a later study used the social distance scale for the first time. In this study he also found the Negro to have the greatest social distance from the white man. Sectional differences were apparent but all sections ranked the Negro lowest.

Since Thurstone developed his methods of attitude measurement there have been several studies made using the Hartshone scale—a Thurstone type. Bolton perhaps made the most interesting study, "The Effect of

15/ Student's Attitudes. Referred to by Bolton, Ibid.

16/ "Race Friendliness and Social Distance", Journal of Applied Sociology. Vol. XI, pp. 272-287. Referred to by Bolton, Ibid.

Knowledge Upon Attitudes Toward the Negro."^{17/} She studied two groups of students at Georgia State College for Women. One was an experimental group of 70 and another, the control group, of 90 students. In the experimental group, problems of Negro education were studied and in the other no reference was made to the Negro. Measurement was taken for both groups at the beginning and at the end of the course on History of Education. It was found that the experimental group did acquire a knowledge about the Negro but that this increased knowledge did not change the attitudes toward the Negro. It was concluded that the pattern of social organization determines the attitude. One might question the manner in which the Negro problem was discussed in this study. Mere knowledge might either intensify or diminish the attitude depending upon the bias with which the knowledge was given out to the students.

Another study of student attitudes toward the Negro was made by V. M. Sims and J. R. Patrick in 1934.^{18/} The measurement used was the Hinkley Scale constructed according to Thurstone's techniques. For their sample they chose beginning psychology classes at the University of Alabama and Ohio University. In these two groups there were 156 students from southern homes, 115 students from northern homes enrolled in the University of Alabama, and 97 students from northern homes enrolled in Ohio University. The results show that the northern students were most favorable to the Negro and the northern students in the south were more favorable than the southern students. Statistically significant were the differences in mean scores for the three groups.

^{17/} Bolton, Ibid.

^{18/} "Attitude Toward the Negro of Northern and Southern College Students", Journal of Social Psychology, Vol. VII, pp. 192-204, 1936.

Groups	Difference/Probable Error
North, North-in-South	8
North, South	21
South, North-in-South	10

With the attitude test the Otis Self-administering Test of Mental Ability was also given. The Pearson coefficients for correlation between the Otis test and the attitude scale were so low as not to be statistically significant. For the North, North-in-South, and Southern groups the coefficients equalled $0.29 \pm .06$, $0.13 \pm .05$, and $0.11 \pm .05$, respectively. According to these writers there may be some reason for the higher correlation in the northern group, which should be investigated further.

There was a consistent difference between the males and females on the scale total for the three groups.

Group	Difference/Probable Error
North	4.2
North-in-South	3.0
South	4.0

These ratios are not quite large enough to be statistically significant but the consistency of the difference leads to the belief that there is actually a difference.*

A trend in scores which would be logically surmised was demonstrated in the results of the North-in-South group. As the students were in the South longer their attitude scores tended to approximate the southern group, due to the influences of the environment.

No statistically significant difference was found for groupings on the basis either of the size of the home community or of parental occupation.

D. D. Drobs^{19/} gave the Hinkley scale at the beginning of the school term in a class on the Negro at Ohio State University. A retest was

^{19/} "Education and Negro Attitudes", Sociology and Social Research, Vol. XVII, pp. 137-141, 1932.

* This is the interpretation placed on these results by Sims and Patrick.

given three months later to determine the influence of the course on the attitudes toward the Negro. A rather small sample--only 30--was used. The mean score was slightly higher than that for the group at Ohio University mentioned above. It may be inferred from this that the curve was skewed to the right, due to the fact that only those having the more favorable attitudes volunteered to sign their names to both tests. The results were as follows:

	Cases	Mean	σ -Mean	σ	Differ- ence	σ -differ- ence	<u>Difference</u> <u>σ-difference</u>
Before	30	7.15	.32	1.80	.58	.48	1.20
After	30	7.73	.36	2.00			

Whether or not this ratio is large enough to be significant is open to question. It would appear that the course had increased the deviation of the group. There was a difference in scores for the different classes, and here also greater variability.

<u>Groups</u>	<u>Cases</u>	<u>Mean</u>	<u>σ</u>
Juniors	20	6.95	1.04
Seniors	29	7.43	1.71
Graduates	9	8.22	2.61

If this tendency is substantiated by further sampling it may be accurately said that college training is a process changing prejudices, but this sample is so small that the above differences might be traced to a sampling error.

To determine how early and how rapidly attitudes toward the Negro develop, E. L. Horwitz ^{20/} made a study of attitudes toward the Negro of boys ranging from kindergarten age to eighth grade from New York City and from rural and urban communities of the South. In place of a series of statements to which to react the subjects were given photographs of four white and eight Negro boys of various degrees of skin color. The

^{20/} "The Development of Attitude Toward the Negro", Archives of Psychology No. 194, 1936. Referred to by Murphy, Murphy, and Newcomb, Op. cit., pp. 925-927.

subjects were asked to select the one they liked best, next best, etc. Then they were asked to select companions for various imagined situations. Another series of pictures, this time of social situations, posed by both white and Negro boys in identical situations was given. For this the subjects were asked to select the groups which they would prefer to join.

The results showed definitely that preference for whites is present even in the kindergarten. The increase in prejudice between kindergarten and first grade was evident on the "Show-Me" test. Only on the "Social Situation" test was there any reliable increase in prejudice with increasing grade level and even here the increase was slight. The difference between the northern and southern students was also very slight.

Most studies of the relationship of age and attitude toward the Negro have dealt with the later age groups. C. W. Hunter ^{21/} compared northern students with northern adults and southern students and southern adults. The only reliable differences found in the two comparisons were concerned with the question of Negro intelligence. The students in both comparisons were found to give the Negroes far greater intelligence than did the older groups. But this difference may have been due to a greater acquaintance by the students with recent findings in the field of social psychology on the subject. Hence it may be concluded that no significant differences were found in this study among the various age groups.

Probably the most comprehensive study yet undertaken of factors related to racial attitudes has been made by Murphy and Lickert. ^{22/} The

^{21/} "A Comparative Study of the Relationship Existing Between the White Race and the Negro Race in the State of North Carolina and the City of New York," Master's Essay, Columbia University, 1927. Referred to by Murphy, Murphy, and Newcomb, Op. cit., pp. 927-928.

^{22/} Gardner Murphy and Rensis Lickert, Public Opinion and the Individual.

study included samples of various student bodies from northern and eastern universities. Since their scale for the measurement of the attitudes toward the Negro was used and many comparable factors were considered in the present study, the earlier findings by Murphy and Lickert will not be reviewed here. However, their findings will be discussed in relation to the results of the present study in later chapters.

From this review of literature it was apparent that the factors considered showed little consistent relationship with attitudes toward the Negro.

Since none of these previous studies included a sample of the Oklahoma student population, it was deemed worthwhile to examine the relationship between these and other pertinent factors and attitudes toward the Negro for this group.

Purpose of This Study

The purpose of this study was to discover the possible relationships between certain social and economic variables and the attitudes of Oklahoma Agricultural and Mechanical College students toward the Negro. The variables considered included physical characteristics, home environment, academic interests and achievements, vocational choice, extra-curricular participation in high school and college, and previous contact with the Negro.

CHAPTER II

SOME PRELIMINARY CONSIDERATIONS

Scope

The present study was based on results from a questionnaire and attitude scale given to 173 students in Oklahoma Agricultural and Mechanical College freshmen English classes during the spring semester of 1939.* The questionnaire used contained a group of items which it was believed would denote major factors in the environment and personality of the student which have bearing on attitudes toward the Negro. These major factors and the items included under them are:

Physical Characteristics

- Age
- Sex
- Race

Community Background

- Type of community
- Racial composition of home county
- Playing with Negroes
- Working with Negroes
- Negro servants in home

Family Environment

- Birthplace of father
- Birthplace of mother
- Age of father when he came to Oklahoma
- Age of mother when she came to Oklahoma
- Religion of father
- Religion of mother
- Political party of father
- Political party of student
- Father's occupation (if farmer, his tenure status)
- Parent's income

Educational Factors

- School
- College major
- Participation in extra-curricular activities
- Membership in fraternities
- Intelligence test scores
- Academic record
- Magazines read
- Vocational preference

* See Appendix A for a copy of the questionnaire. The Murphy and Lickert Negro Scale was used in this study by permission of the authors.

In the selection of these factors an attempt was made to adapt items from former studies to the unique conditions of Oklahoma. Discussion with members of the Department of Sociology and Rural Life and with individuals well acquainted with the peculiar characteristics of this area brought many suggestions of factors that might profitably be considered.

The scale used was one constructed by Murphy and Lickert based on samples of student attitudes in several northern and eastern universities. ^{1/} The critical ratio method was used in the selection of the scale items. In all, the scale included five statements, each with three possible responses and ten statements with five possible responses. The total potential range of score was between 20 and 70 points.

The chief reason for the selection of this scale was its brevity. Since the results of the use of this scale elsewhere have been found to be comparable with those of the Thurstone test, it was considered advantageous to use the former. ^{2/}

The Sample

In selecting the sample various factors were considered. If characteristics of the home environment of the students were to be considered in relation to their attitudes toward the Negro, the sample would have to be chosen from students who had only recently left this environment. Otherwise, the experiences of college life might have reshaped the attitudes without reference to the home environment. In order to represent students with various types of family backgrounds, academic interests, and occupational choices, the sample had to include

^{1/} The universities were Columbia, Michigan, Northwestern, and Yale.

^{2/} Discussion of the validity and reliability of the scale for application to Oklahoma students will be discussed at a later point since it was believed that the sample and the procedure employed in determining these should be described first.

students from each of the six schools of the college. To fulfill these two considerations freshmen English classes were chosen. All freshmen in the six schools are required to take this course. When the enrollment for each section is made up care is taken that the number of students from each school is in the same ratio which that school bears to the total college enrollment. Therefore, utilization of the freshmen English classes automatically gave a cross-sectional sample of each school.

Procedure

The attitude tests with accompanying schedules were passed out to the students in freshmen English classes. The students were instructed to fill in as many of the blanks as they could and were assured their answers would be entirely confidential. Also, they were asked to answer the questions as accurately as possible. One possible weakness of this procedure was the requirement of having students give their names. Anonymity was impossible since the intelligence test scores and academic records were to be used in the study.

After the tests were given they were scored. The score of the intelligence test for each student was found in the office of Administrative Studies. Two different tests had been used among different groups of students. In order to have comparable scores for the two different tests the percentile rank of each student was used in place of his raw score on the test. Each student's transcript of grades from the Registrar's office was recorded and the grade point averages were calculated on the basis of 4,3,2,1, and 0 points respectively for each hour of A, B, C, D, and F grades. When all these data were collected, they were coded on Hollerith machine tabulating cards.

The Validity of the Scale

As pointed out previously the relationship between verbal behavior and other forms of overt behavior has yet to be determined. Until

such relationship is examined and determined, there is no method of judging accurately the validity of an attitude scale by external criteria. As Murphy and Lickert have pointed out even though this relationship is undetermined it may be assumed that the scale is valid because "...the verbal reactions studied here are related to problems in reference to which the majority of our reactions in every day life are verbal. We declare ourselves in favor of one issue and opposed to another, and such declarations are socially accepted as symbols for overt acts. In many cases it would seem reasonable to conclude that since our daily behavior in these areas is largely verbal, the verbal responses would be indices of other habits." ^{3/}

Validity of the Items

Even though the scale as a whole was assumed to be valid it seemed advisable to check the validity of each item for use in Oklahoma. This was done by analysing each item by the critical ratio method described above. ^{4/} The upper and lower deciles of an array of the total sample based on the scale scores were selected for this calculation. The customary standard for retention—a critical ratio of three or higher—of items was used. ^{5/} Such a ratio means that the item has excellent differentiating power since the recurrence of the difference in another sampling would be expected in 999 cases out of 1,000. If the critical ratio should prove to be less than negative three it would be necessary

^{3/} Ibid, p. 52.

^{4/} See page 7.

^{5/} All critical ratios presented in the discussion of the results of this study were based on the standard rather than the probable error. The formula for the critical ratio was taken from R. F. Sletto, Construction of Personality Scales by the Method of Internal Consistency, p. 3.

to conclude that the item was differentiating sharply but that the values for the various responses had been assigned in reverse order. The results of these calculations for each item are given in Table 1.

Table 1. Results Obtained From the Application of the Criterion of Internal Consistency to Each Item

Item	: Item Scale : :Value Difference :	Critical : Ratio :	Rank
1	1.28	5.93	11
2	1.82	15.76	2
3	1.29	6.59	7
4	.94	1.96	15
5	1.24	6.81	6
6	1.29	4.38	13
7	.88	5.50	12
8	1.53	15.94	1
9	2.53	10.29	3
10	1.70	6.42	8
11	1.12	3.25	14
12	2.00	8.77	5
13	2.35	10.04	4
14	1.59	6.06	10
15	2.12	6.40	9

As the table shows, item 4 had a critical ratio below the standard set but since such a ratio (1.93) may be expected to differentiate between favorable and unfavorable attitudes in 976 cases out of 1,000, the item was considered valid. All other items had critical ratios well above the retention standard. ^{6/}

The Reliability of the Scale

The length of a scale is one of the most important factors in determining the reliability of a scale. ^{7/} Since the scale used in this

^{6/} See Appendix for comparison of these results with those from a previous application of these items.

^{7/} For a discussion of this point see Herbert Sorenson, Statistics for Students of Psychology and Education, pp. 339-42.

study contained fewer items than many others, it might be expected that the coefficient of reliability would be relatively low. A coefficient of 0.90 or higher is usually considered a desirable criterion for reliability. ^{8/} There are three principle methods of testing reliability: by correlating the scores of the split-halves of the scale, by correlating the scores of the test and retest of the same subject, and by correlating the scores of tests given simultaneously to the same subject. The first of these methods was used here. The total score of the odd statements was correlated with the total score of the even statements, leaving out the fourth statement. The coefficient proved to be 0.568 and when corrected for attenuation ^{9/} it was 0.725. ^{10/} These coefficients were somewhat lower than the standard usually set. Possibly, the reliability would have been higher if other methods had been used.

General Results

This scale had already been given at various schools in other parts of the country. ^{11/} The mean score of the sample used here was 50.98 which indicated that attitudes according to this scale in this part of the country fall between those in the northern Middlewest and the Old South. ^{12/} However, the high standard deviation (6.73) and range (33-67) indicated that there is no homogeneity of attitude in this area. This would perhaps be expected when the location and population characteristics of Oklahoma are considered. Being a border state it has characteristics

^{9/} For formula see Herbert Sorenson, Op. cit., p. 342.

^{10/} For comparison with results reported for the state in other areas see Appendix.

^{11/} Murphy and Lickert, Op. cit., p. 53.

^{12/} See Appendix.

of both North and South. A large percentage of its population came from Kansas and Texas, bringing divergent attitudes toward the Negro. Besides having many transplanted traditions of the Old South, Oklahoma has a slave history as there were a few slaves in the Indian Territory before the Civil War. All these influences no doubt have played their part in the formation of the attitudes of the younger generation.

CHAPTER III

RELATIONSHIP OF CERTAIN SOCIALLY SIGNIFICANT VARIABLES
TO ATTITUDES TOWARD THE NEGRO

Introduction

It is the purpose of this chapter to present the basic findings of the study in regard to the relationship between certain socially significant variables and attitudes toward the negro. The major classifications of these variables include: Physical Characteristics, Family Environment, Community Background, and Educational Factors. Each of the major topics and the variables included under them will be discussed from the standpoint of their assumed bearing on racial attitudes and in regard to the actual relationship between them and attitudes toward the Negro as revealed by scores on the Murphy and Lickert Negro Scale. The findings of this study will be compared with those of other investigators wherever they are closely comparable.

Physical Characteristics

Attitudes and physical characteristics may be directly or indirectly related. Physical characteristics become important in the determination of attitudes when they provide an apparent basis for differentiation between groups. It is the purpose of this phase of the study to determine whether such physical factors as age, sex, or race separate individuals into groups possessing significantly different attitudes toward the Negro.

Age

The possibility existed that different age groups would show different attitudes toward the Negro. The younger students may have been conditioned to slightly different attitudes from those of older students

in their early environments. However, the sample was limited very largely to later adolescence, 89 percent of the students ranging from 18 to 22 years of age inclusive. While the range in ages is relatively short, it is sufficiently great to allow for potentially momentous differences in education, biological and psychological maturation, social contacts and other forms of attitudinal conditioning of the students.

Table 2. Comparison of Attitudes by Ages

Age	Number	Mean	Standard Deviation	Rank
17 and under	5	52.20	5.81	3
18	53	50.36	5.80	5
19	54	52.39	6.86	1
20	26	52.14	6.71	2
21	10	41.60	22.00	7
22	10	48.40	4.84	6
23 and above	15	50.47	7.40	4

An examination of the data in Table 2 leads to the conclusion that, while there are appreciable absolute differences between the mean scores of students of different ages, the differences are not significant, because they are not consistent with increase or decrease in age and because the standard deviations of the means were greater than the differences between the means. It is apparent, therefore, that differences in attitudes toward the Negro do not bear a close functional association with age during the adolescent years.

Sex

As it has already been pointed out, Sims and Patrick ^{1/} found that in their samples the females were more tolerant of Negroes than the males and that these differences were somewhat significant. However, Murphy and Lickert ^{2/} found no significant difference in mean

^{1/} See above, p. 12.

^{2/} Op. cit., p. 87.

scores for the two sexes. Since there is no agreement on the relationship between racial attitudes and sex, it was considered worthwhile to make such a comparison. The results of this comparison are given in Table 3.

Table 3. Comparison of Attitudes
of Men and Women

Sex	Number	Mean	σ
Males	125	50.53	6.79
Females	48	52.14	6.30

Taken alone, the absolute differences between the mean scores of males and females are suggestive of statistical significance as may be seen in Table 3. However, the standard deviations of those means are about four times as great as the difference between the means. This fact leads to agreement with Murphy and Lickert as far as the present study is concerned. That is, the influences which determine attitudes condition both sexes in the same way with similar results.

Race

The large number of Indians or part Indians in the population of Oklahoma was evidenced in the sample. There were 32 out of 173 students who were part Indian. The social status of Indians in Oklahoma is not well defined, as the position assigned them differs in various groups in the white population. Furthermore, the status assumed by the Indians themselves is often not in agreement with the various positions assigned them. Evidences of this indefinite social position are found in the uncomplimentary remarks occasionally heard concerning the Indian, while on

the other hand many individuals take great pride when they are able to claim Indian ancestry.

Such an indefinite social position might influence the attitudes which those claiming Indian ancestry have toward minority groups of low status. These individuals might try to compensate for their own questionable status by endeavoring to push those lower in position than themselves still further down the social scale. On the other hand the historic conflict between the whites and Indians might cause those claiming Indian blood to be more tolerant of the Negroes, since the latter also, have a long history of conflict with the whites.

The question involved in this study is whether those students who identified themselves in some degree with the Indian race would show significant difference of attitudes toward the Negro from those claiming no Indian blood. Table 4 shows the results of this comparison.

Table 4. Comparison of Attitudes of Students
With and Without Indian Blood*

Race	Number	Mean	σ ²
Indian blood	52	51.71	7.18
Whites	138	50.77	6.57

* Total included three schedules in which the item was not answered.

These above figures show that while the average score for those individuals claiming Indian blood was slightly higher than the mean score of the white group, the difference was much less than the standard error for each group. This signifies that the difference in mean scores was not great enough to be statistically significant. Hence, it may be concluded that as far as this study indicates there is no relationship between claiming Indian ancestry and the attitudes toward the Negro.

Community Background

The community backgrounds of the individual are considered to be of influence in the conditioning of his attitudes. Individual communities have distinctive values which are evolved from mainly local social situations. Individuals in the community develop attitudes toward these values. Therefore, it was believed that the community backgrounds of the individual might affect his attitudes toward the Negro.

Type of Community

Rural and urban environments differ greatly in composition of population, type of employment and many other characteristics. Due to these differences attitudes on some important issues also differ.^{3/} Hence, it was considered that there might be some difference in the groups on attitudes toward the Negro. The student was asked to state the number of years he had lived in the various types of communities and the individual was classified according to the type in which he had lived at least half his life to date. This was done in order to offset some of the effects of mobility.

Table 5. Scale Score in Relation to Type of Home Community*

Type of Community	Number	Mean	σ
City, 15,000 and over	34	50.68	6.39
City, 2,500 - 14,999	39	50.18	6.94
Village, 250 - 2,499	30	53.47	5.78
Farm	66	50.36	6.95

* Total included 4 schedules in which this item was not answered.

^{3/} See P. Sorokin and C. C. Zimmerman, Principles of Rural-Urban Sociology, Chapter 1f, especially pp. 56-57 for an extensive discussion of these differences.

Although the mean score of those living in villages was slightly higher than that for students from the other types of community shown in Table 5., this difference was obscured by the standard deviation of the means. From this it is deduced that there are no significant differences reflected on the basis of the type of community. This same conclusion is reached by Murphy and Lickert. ^{4/}

Racial Composition of Home County

Oklahoma counties vary considerably in the percentage of total population which is Negro. In an effort to determine whether or not this had any relationship with the students' attitude, the group was broken down on the basis of the percent of Negro population in the home county as shown in Table 6.

Table 6. Scale Score by Percentage of Negroes in Home County*

Percent Negroes	Number	Mean	σ
0 - 4	73	51.47	6.60
5 - 8	52	49.68	7.22
9 - 12	30	52.43	6.29
13 - 16	4	52.43	3.83
17 - 20	1	40.00	—
21 - 24	2	47.50	—
25 +	9	52.11	5.99

* Total includes 2 schedules in which this item was not answered.

Again the absolute differences of the means of the groups are neither great nor consistent enough to be significant, nor are the differences between means of the groups great enough to offset their standard deviations. From this it may be surmised that there is no apparent relationship

^{4/} Op. cit., p. 70.

between the percentage of Negroes in the home county and the attitudes of students toward the Negro. Because of the scarcity of competent comparable investigations on this point as well as because of possible shortcomings of the census methods of gathering county data, the conclusion reached is to be accepted with caution and reservation until it has been confronted with more exhaustive researches than have been made here.

Contacts With Negroes

There has been a popular idea among some groups that close contact between the two races would modify traditional prejudices. If this be true and the sample be large enough to insure accuracy, it might be thought that individuals who had had intimate contacts with Negroes would show higher average scores on the scale than those of persons whose contacts with the Negro had been only casual and infrequent. In order to throw light on this question through actual measurement, the students were asked whether they had ever worked, played with Negroes, or had them as servants in the home. The results of this measurement are given in Table 7.

Table 7. Scale Scores on Basis of Contacts With Negroes

Nature of Contacts	Number	Mean	σ
Worked with Negroes?			
Yes	37	49.54	6.18
No	80	50.76	7.03
Not ascertainable	56	52.23	6.11
Played with Negroes?			
Yes	30	52.13	6.95
Yes	30	52.13	6.95
No	143	50.73	6.72
Negro servants in home?			
Yes	75	51.12	5.64
No	91	50.79	7.50
Not ascertainable	7	51.86	7.28

Work as well as play with Negroes implies cooperation, relative intimacy and frequency of contacts with them as does also the presence of Negro servants in the home. These associations between the races indicate a lack of extreme prejudice. Often, actual affection is built up between the Negro and the white in the work-play relationship. Hence, it seemed probable that attitudes regarding Negro playmates, servants and hired men which are often conditioned by contacts made very early in life might be characterized by rather general leniency on the part of those students who had had the close work-play contacts with them. ^{5/}

In spite, however, of the general assumption which appeared to be plausible enough, it may be seen readily that the figures in Table 7 do not indicate that any of the three factors has a definite functional association with the students' attitudes toward the Negro. Either the differences of the mean scores are not appreciable or the standard deviations are so great as to render void any possible significance the differences of means might have had.

Family Environment

There is little doubt that the family group is a fundamental force in the determination of the attitudes of the individual. Cooley ^{6/} pointed out many years ago that the individual normally receives his introduction to the prevailing social organization through his family. This group gives the child many definitions and attitudes which help to shape his entire life pattern. Such factors as occupation, background of parents, religion, and political affiliations all influence the home and consequently the attitudes of the children. Do such factors influence

^{5/} See pp. 13-14 above; see also Lasker, Race Attitudes in Children.

^{6/} Social Organization.

attitudes toward the Negro in any way that can be measured or is this attitude so deeply embedded in the cultural pattern that the child is conditioned to the dominant attitude irrespective of these factors?

Birthplaces of Father and Mother

In order to ascertain whether there was any difference in test score for those with northern and southern born parents, the students were asked to indicate the state of birth of each parent and the age at which each came to Oklahoma. It was thought that there might be differences in attitudes due to the fact that divergent sectional culture patterns would be carried by the parents and reflected in the students.

As Table 8 shows, neither significant differences nor consistent changes exist. Thus, it may be concluded that the birthplace of parents and the resulting transfer of their early behavior patterns to Oklahoma did not influence perceptibly the attitudes of their children. Either the parents had changed their attitudes to conform to those dominant in this area or the students' attitudes were determined chiefly by experiences outside the home.

Religion

While Oklahoma does not possess the multiplicity of diverse religious groups found in the predominantly urban states of the northeast, its religious pattern is by no means without variations that are of importance in the local community. These differences may be of considerable importance in determining the social attitudes of persons belonging to the various groups. Since the religious affiliation of the parents is perhaps the best single index of the religious conditioning of their children, the attitudes of the students toward the Negro were compared on this basis.

Table 8. Score by Birthplace and Age on
Moving to Oklahoma of Parents

Parent	Number	Mean	σ
Father*			
South			
0 - 10	10	51.60	8.56
11 - 20	20	50.40	6.43
21 +	20	51.20	6.82
North			
0 - 10	11	53.27	5.57
11 - 20	10	51.40	8.03
21 +	19	53.10	5.19
Border			
0 - 10	6	49.10	6.67
11 - 20	12	49.33	6.76
21 +	11	50.92	4.43
Oklahoma	16	49.12	6.45
Mother**			
South			
0 - 10	15	47.78	3.77
11 - 20	15	52.41	10.57
21 +	13	48.92	5.54
North			
0 - 10	11	52.73	6.01
11 - 20	17	48.76	6.51
21 +	12	51.51	9.37
Border			
0 - 10	7	48.57	4.61
11 - 20	14	50.71	6.08
21 +	7	56.71	6.13
Oklahoma	38	52.18	4.34

* Total includes 38 schedules in which this item was not answered.

** Total includes 24 schedules in which this item was not answered.

Table 9. Comparative Scores by
 Religion of Parents

Religion of Parent	Number	Mean	σ
Father			
Unitarian, Congregational, etc.	3	52.10	6.60
Lutheran, Episcopal	2	52.50	10.50
Christian Science	2	58.50	5.50
Protestant*	147	50.86	6.58
Roman Catholic	3	57.33	3.73
Miscellaneous	4	48.75	7.43
Not ascertainable	12	49.83	6.44
Mother			
Unitarian, Congregational, etc.	3	52.00	7.35
Lutheran, Episcopal	2	56.00	7.00
Christian Science	4	53.25	6.87
Protestant*	149	50.87	6.14
Roman Catholic	2	53.00	--
Miscellaneous	8	51.25	6.90
Not ascertainable	5	48.40	8.38

* The failure of the students to indicate the exact denomination resulted in the necessity of using this classification.

Unfortunately the replies on this factor were quite inadequate, however, they are presented for what they are worth. As may be seen in Table 9, absolute differences are found in the means of the various religious groups, however these are not consistent from group to group regardless of which parents affiliation they are based on. Neither are they of statistical significance when the errors of the means are taken into consideration. Thus it may be concluded that for the Oklahoma sample no significant relationships exist between attitudes toward the Negro and the religious factors considered.

Political Party

The voting population of Oklahoma is predominantly Democratic. Except in a few northern counties very few major elective offices are ever won by Republicans. The relative unimportance of such "radical"

minority parties as the Socialists and Communists is indicated by the fact that they rarely enter candidates in election contests. The overwhelming predominance of the Democratic party in the state is largely a reflection of cultural affiliation with the Old South, Thus, it was reasoned that families voting the Republican ticket might be doing so in protest against this Southern tradition and that this protest would be reflected in the attitude toward the Negro. To test this assumption the scale scores were grouped according to both the father's and the student's political party.

Table 10. Comparison of Scale Scores by Political Party of Father and Political Party of Student

Political Affiliation	Number	Mean	σ
Father's Political Party			
Republican	36	51.50	6.07
Democrat	110	50.43	6.87
No one party	22	52.55	7.04
Other	5	52.40	5.12
Student's Political Party			
Republican	20	52.70	5.74
Democrat	97	50.57	2.82
No one party	51	50.88	6.72
Other	1	52.00	--
Not ascertainable	4	53.25	4.49

It is readily apparent from Table 10 that the relationship between the political affiliation, either of the father or the student, and the student's attitude toward the Negro is neither consistent nor statistically significant. Insofar as they are comparable, these results agree with those of Murphy and Rensis.^{7/}

^{7/} Op. cit., pp. 80-84.

Father's Occupation

Occupation of the father is without doubt a significant influence in conditioning many of the attitudes of the child. It is a major factor in determining the socio-economic status of the family and thus affects the social contacts and associations of the family members. Different occupational groups are known to have different attitudes on many questions. It is probable that many of these attitudes are communicated from parents to children through the processes of social interaction within the family group. For these reasons it was decided to correlate the subjects' scores on the racial attitude test with the occupation of the father. The results of this comparison are shown in Table 11.

Table 11. Students' Attitudes in Relation to Fathers' Occupations

Occupation	Number	Mean	σ^2
Semi-skilled	9	51.33	5.61
Skilled	21	52.14	6.66
Sales and clerical	15	46.87	5.76
Managerial	17	50.12	7.52
Business	16	55.00	4.32
Professional	17	52.82	6.89
Farmer (All)	64	51.17	6.72
Owners	50	50.70	7.15
Tenants	12	50.33	4.33
Not ascertainable	2	44.67	7.91
Deceased and retired	10	51.40	4.67
Not ascertainable	4	45.10	7.78

As the figures in Table 11 reveal there are absolute differences in the mean scores of students when grouped on the basis of the occupation of their father. However, these are not consistent with variations in the occupational scale and tend to lose their statistical significance when their high degree of variability is considered. Thus, it must be concluded that the occupation of the father is not significantly related

to the attitudes of the Oklahoma student group toward the Negro.

Parent's Income

The income of the parents is likewise an important factor in the socio-economic status of the family. Despite the fact that income is closely associated with the occupation of the father it perhaps reflects economic factors not adequately revealed by the father's occupation. For this reason comparisons were made between scale scores of students grouped according to this variable.

Table 12. Comparison of Attitudes With Reference to Income of Parents

Income	Number	Mean	σ
0 - \$ 999	25	50.88	6.89
1,000 - 1,999	64	50.83	7.13
2,000 - 2,999	32	51.31	7.26
3,000 - 3,999	15	50.87	5.23
4,000 - 4,999	4	47.75	4.82
5,000 and up	5	51.60	2.42

As may be seen from an examination of the figures shown in Table 12, parent's income is neither consistently nor significantly related to the student's attitude toward the Negro. These results, as well as those of the previous table, are in essential agreement with those reported by Murphy and Lickert for similar socio-economic variables. ^{8/}

^{8/} Op. cit., pp. 85-87.

Educational Factors

Various features of the educational process affect the attitudes of the student. From the time the child starts attending primary school he is a member of groups that are in relatively dynamic social interaction. This interaction is a potent factor in the development of his attitudes. By the advent of adolescence his attitudes are relatively well shaped. However, his college experiences, coming as they do in the late adolescent years, may have some appreciable influence on his previously formed attitudes.

Schools

It was thought that the identification of students according to the various schools in Oklahoma Agricultural and Mechanical College might be roughly selective of various factors contributing to attitudes toward social organization. Furthermore, since the student bodies of the different schools constitute somewhat socially separate groups, it would seem possible that interaction within each might result in different racial attitudes. The separation of students by schools is shown in Table 13.

Table 13. Comparison of Score
on Basis of Schools

School	Number	Mean	σ
Agriculture	46	50.26	7.46
Commerce	44	51.32	3.84
Arts and Science	8	55.88	6.01
Engineering	41	50.80	5.84
Home Economics	20	49.81	7.10
Education	14	51.64	4.70

From these data it can be seen that the students in the School of Arts and Sciences have the highest mean score, although they constituted a disproportionately small part of the sample. By the criteria of differences

of means and of standard deviations of means, as used previously, we may conclude that there are no statistically significant differences between attitudes of students in the various collegiate schools.

College Major

In order to obtain a more exact picture of academic interests than is shown by schools, the group was broken down by subjects selected by the students as their probable major fields. College courses vary in their general reference to racial questions. The biological sciences may modify the prejudices against minority races by the emphasis placed on the physical similarities of all races. Psychology and the social sciences, particularly sociology, have quite a divergent interpretation from the popular conception of cultural differences based on racial differences. It is quite possible that the various courses would attract different types of personality which would be reflected in their attitudes toward the Negro even before actual pursuit of those courses is begun. Secondly, later experiences in the course may alter the attitudes. This would appear to be not only one of the fundamental purposes of higher education but also one of the basic manifestations of differences in attitudinal behavior.

Table 14. Comparative Scale Scores by College Major

Major Selected	Number	Mean	σ
Agriculture	37	50.52	7.56
Engineering	32	51.06	5.27
Commerce	38	51.29	6.97
Natural Science	4	50.00	7.87
Biological Science	7	54.28	6.37
Social Science	12	49.92	6.87
Art, Literature, etc.	8	56.20	6.06
Home Economics	18	49.11	7.12
Miscellaneous and Not Ascertainable	16	50.38	7.71

The comparisons shown in Table 14 indicate that only the biological sciences and the arts have any divergence from the mean for the entire group. These two groups, however, have too few students to make the difference statistically convincing, and despite the obvious plausibility of the assumptions, it must be concluded that the chosen major fields of college students are not selective of differences in racial attitudes so far as this study is concerned.

Participation in Extra-Curricular Activities

Participation in activities outside the classroom might conceivably be related to attitudes toward the Negro for two reasons. Students who enter into these activities usually do so voluntarily. For this reason it might be thought that they would show more tolerance in working with various types of students. Secondly, these extra-curricular activities frequently include various types of clubs for the discussion of social issues. Such discussion might influence the reorganization of students' attitudes. The students were asked to check both athletic and non-athletic activities in which they have participated in college. Those checking one or two activities only were considered moderately active and those with three or more activities were classed as very active. The results of this comparison are given in Table 15.

The figures in Table 15 indicate that there was an inverse relationship between the degree of participation in athletics and a direct relationship between the degree of participation in non-athletic activities with the scores made on the attitude test. However, the differences between the various groups were so slight in relation to the standard errors of the means that these relationships were not statistically significant. ^{9/}

^{9/} Murphy and Lickert, Op. cit., p. 90. These writers came to essentially the same conclusion.

Table 15. Comparison of Scale Scores on Basis of Participation in College Activities

College Activity	Number	Mean	σ
Athletics:			
Very active	11	49.27	4.02
Moderately active	50	49.66	6.46
Inactive	112	51.73	6.95
Non-Athletics:			
Very active	2	58.50	5.50
Moderately active	51	51.24	5.32
Inactive	120	50.74	7.22

But since the results had consistency a more sensitive scale might produce significant relationships between the degrees of activity and the attitude scores.

Membership in Fraternities

Fraternities and sororities probably represent the nearest approaches to primary groups to which students belong while attending college. Such intimate groups are peculiarly important in shaping the individual's attitudes. It is fairly certain that experiences in fraternity groups modify the members' attitudes toward many parts of the social organization. To what extent does this take place in regard to racial attitudes?

Another feature of the fraternity system is that membership is highly selective according to the standards of the individual fraternity group. In many of the college activities fraternity membership contributes to a higher social status for the individual. The criteria of this selection may include personality characteristics which would influence the individual's attitude toward the Negro.

However, when the separation of students into the two groups shown in Table 16 was made, it was readily obvious that fraternity membership was

Table 16. Comparison of Fraternity and Non-Fraternity
Members on Basis of Attitude Scores*

Fraternity Membership	Number	Mean	σ
Members	16	50.56	7.50
Non-members	150	51.05	6.58

*Total included seven schedules in which this item was not ascertainable.

not a significantly selective factor in racial attitudes of students. ^{10/}
It is probable, however, that in Oklahoma where the status of the Negro is definitely marked off in most respects, the racial issue may not emerge in the selection of fraternity members although fraternity standards may contain potential seeds of attitudinal differentiation on the Negro.

Intelligence Test Scores

Intelligence is related to attitudes in several ways. Individuals with higher intelligence may be responsive to different influences from those with lower intelligence and these influences may produce divergent attitudes. Synthesizing and reasoning require higher intelligence than other forms of learning. Such capacity for reasoning and synthesizing might conceivably influence the development of the students' attitudes. Hence, it might be expected that those more capable of this type of mental effort would show higher scores on the attitude test. With this in mind the intelligence test scores ^{11/} were correlated with the attitude scores.

^{10/} Murphy and Lickert, Op. cit., p. 91. The results of the present study are in agreement with the earlier ones using the same scale.

^{11/} See p. 18 above. The two measurements of intelligence used by the college are the O.S.U. Form 17, and American Council Psychological Examination, Form 1937.

The resulting coefficient was 0.089 \pm .079. Previous studies have also indicated a low relationship between these two variables. ^{12/}

Academic Record

One of the fundamental purposes of higher education may be said to be reshaping of attitudes so that they will be more nearly in conformity with the latest findings of scientific research. The academic record of the student is usually considered as an index to the amount of knowledge the individual has gained in the college courses. If the knowledge gained is actually assimilated into the attitude patterns of the student it should be reflected in measurable changes in attitudes. The question involved here is whether those who have acquired more text-book knowledge show higher scores on the attitude test. In order to throw light on this question the grade point averages ^{13/} were correlated with the attitude scores. The resulting coefficient was 0.118 \pm .076. Such a coefficient is lower than that for any group studied by Murphy and Lickert. ^{14/} In the present case it may be concluded either that the knowledge gained had no relation to the issues involved or that such knowledge, if related to the issues, did not influence the attitudes toward the Negro.

Magazines Read

The reading habits of an individual are influenced by his attitudes and in turn the attitudes are modified by his reading habits. Murphy and Lickert have shown that there is a definite relationship between reading habits and

^{12/} See p. 12 above, and Murphy and Lickert, Op. cit., 102.

^{13/} See p. 11 above.

^{14/} Op. cit., p. 102. In their studies the coefficient of correlation ranged from 0.14 to 0.40.

attitudes toward the Negro. ^{15/} Instead of calculating the average scores on the scale according to type of magazines most frequently read, the attitude scores were correlated with the sums of the "cultural weights" of the magazines read by the individuals. The scoring of "cultural weights" was an application of Leahy's scale of "Cultural Weights of General Interest Magazines." ^{16/} The coefficient of correlation between the attitude scores and the magazine scores was 0.036 \pm .076. The small degree of correlation may have been due to the students writing in names of magazines, merely to make a good showing; or to the inability of the magazine scale to differentiate written content on the basis of its interpretation of racial questions. Possibly such a scale constructed with special reference to content on racial questions would show a higher correlation with the attitude scores.

Vocational Preference

As has been pointed out the occupation of the father did not prove to be a valid indicator of the student's attitude toward the Negro. ^{17/} The occupational choice of the student certainly would reflect his own interests and attitudes toward the various social groups. Each occupational group has a characteristic hierarchy of attitudes and values which differentiates it from other groups. However, each group has other attitudes identical with those of other groups. To which category does the attitude toward the Negro belong?

Murphy and Lickert ^{18/} found that the choice of teaching as a vocation yielded an average score high enough to indicate significant differences

^{15/} Op. cit., p. 95.

^{16/} The Measurement of Urban Home Environment, p. 50.

^{17/} See p. 31 above.

^{18/} Op. cit., p. 99.

Table 17. Attitude Score in Relation to Vocational Preferences

Vocational Preferences	Number	Mean	S.D.
Engineering	21	51.43	5.03
Business	15	48.33	8.22
Medicine and Law	5	54.40	6.83
Secretarial Work	16	52.62	5.59
Vocational Agriculture	20	50.75	6.24
Teaching	32	52.19	5.89
Home Economics	7	49.86	7.23
Agriculture	28	50.64	6.92
Miscellaneous	15	48.40	7.41
Not Ascertainable	14	51.57	9.65

between that and the business and the engineering groups. But in the present study no such significant differences appeared. On the contrary, the mean scores as shown in Table 17 indicate that an undifferentiated attitude toward the Negro is common to all vocational groups. The mean score of the prospective law and medicine group is somewhat higher than that of the other groups but there are too few students in this group to make the difference significant, and the standard deviations of the means are greater than any of the differences between the mean scores of the various groups. Hence, the conclusion follows that the attitudes of the propositi composing this sample are not distinctly differentiated when applied to the Negro.

CHAPTER IV

SUMMARY AND CONCLUSIONS

The purpose of this study was to find out if selected social and economic variables showed any relationship with the attitudes of Oklahoma Agricultural and Mechanical College students toward the Negro.

Murphy, Murphy, and Newcomb's definition of attitudes as "verbalized or verbalizable tendencies, dispositions, or adjustments toward certain acts" was used in this study because it is so stated that it may be subjected to measurement.

A review of the methods which have been used to measure attitudes showed that those of Thurstone and Lickert overcame the difficulties of previous methods. The critical ratio method utilized by Lickert appeared to have given comparable results but with less time and expense than is required by Thurstone's method.

Reviewing the applications of these methods to the measurement of racial attitudes, it was found that the previous studies did not find any significant comparisons of different groups, except between groups in different geographical areas.

A test for the measurement of attitudes toward the Negro which had been constructed by Murphy and Lickert, using the critical ratio method, was given to 173 students in freshmen English classes of Oklahoma Agricultural and Mechanical College. To determine the validity of the items for use on this sample the critical ratio of each item was calculated. One of the fifteen items had a critical ratio slightly below the standard desired but not enough below as to warrant its omission. The reliability of the scale proved to be slightly lower in its present application than in former studies using the same scale.

General factors concerning physical characteristics, community

background, family environment, educational influences and contacts with Negroes were considered in relation to the scores on the attitude test. Each of these factors was broken down so that several variables relating to the same source of influence were examined in reference to the attitude scores.

No statistically significant relationships were noted between any of the selected variables and the scores on the attitude scale. However, the scale may not have been sufficiently sensitive to reveal insignificant distances absolute variations that existed between attitudes of the several groups. Further developments in attitude scale construction may provide an instrument so precise that absolute differences which may exist can be measured. With this qualification regarding the sensitiveness of the scale in mind it may be deduced from the results of this study that the attitude toward the Negro is an integral part of the culture pattern to which all groups in this area are conditioned. It would appear that any influences contrary to this dominant attitude affect only a few and that the attitude is general throughout the area. Further research in life history documents might reveal other variables related to divergent attitudes. These factors might then be subjected to statistical treatment. Further psychological research might also furnish leads for statistical study. It is quite probable that there are some psychological variables that would show a correlation with racial attitudes. In conclusion, it may be said that the present study fails to indicate any social variables that may be considered as indices of attitudes toward the Negro.

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Appendix A

Name _____ Age _____ Sex _____ School _____ Class _____
 Last First
 Home _____
 Post Office _____ County _____ State _____

Are you part Indian? Yes _____ No _____ How Much? _____
 All $\frac{3}{4}$ $\frac{1}{2}$ $\frac{1}{4}$ or less

How many years have you lived in (state number)

City of over 15,000 people _____
 City of 2,500 to 15,000 people _____
 Village with less than 2,500 people _____
 On a farm _____

Was your father born in America? Yes _____ No _____

Was your mother born in America? Yes _____ No _____

In what state was your father born? _____

In what state was your mother born? _____

How old was your father when he came to Oklahoma? _____

How old was your mother when she came to Oklahoma? _____

What is your father's religion? _____

What is your mother's religion? _____

What is your religion? _____

Check the political party which your father favors (votes for its candidates)

Republican _____ No One Party _____
 Democrat _____ Other _____

Check the political party which you favor

Republican _____ No One Party _____
 Democrat _____ Other _____

What is your father's occupation? _____
 (Be specific - for example, if oil field worker, state whether he is
 pumper, etc.)

If your father is a farmer, what is his tenure status?

Owner _____ Tenant _____ Laborer _____

Check your parents' approximate income

\$ 0-499 _____	2,000-2,499 _____	4,000-4,499 _____
500-999 _____	2,500-2,999 _____	4,500-4,999 _____
1,000-1,499 _____	3,000-3,499 _____	5,000 and up _____
1,500-1,999 _____	3,500-3,999 _____	

Appendix A - continued

In what extra-curricular activities did you participate in high school?

<u>Athletics</u>		<u>Non-Athletic</u>	
Football _____	Baseball _____	Dramatics _____	Stamp Club _____
Basketball _____	Track _____	Debating _____	Social Clubs _____
		Y.M. or Y.W.C.A. _____	Other _____

Are you a member of a college fraternity or sorority? Yes _____ No _____

In what extra-curricular activities do you participate in college?

<u>Athletics</u>		<u>Non-Athletic</u>	
Football _____	Track _____	Dramatics _____	Y.M. or Y.W.C.A. _____
Basketball _____	Intramural _____	Publications _____	Pep Organizations _____
Baseball _____	Other _____		Other _____

In what subject do you expect to major? _____

Do you earn part of your college expenses? Yes _____ No _____

How much? _____
 All $\frac{3}{4}$ $\frac{1}{2}$ $\frac{1}{4}$ or less

What magazines do you most frequently read? (In rank of frequency of reading)

What occupation do you expect to enter? _____

Have you ever worked with Negroes? Yes _____ No _____

As a child did you ever play with Negroes? Yes _____ No _____

Did you have Negro servants or other Negro laborers in your home? Yes _____
 No _____

Check answers with which you agree - as you do in multiple choice examinations.

1. Would most Negroes, if not held in their places, become officious, overbearing, and disagreeable? Yes _____ ? _____ No _____
2. If you went into a cafeteria in a northern city, sat down, and then realized you were at the table with a Negro, would you leave the table? Yes _____ ? _____ No _____
3. Would you shake hands with a Negro? Yes _____ ? _____ No _____
4. Do you disapprove of the use of the term "nigger"? Yes _____ ? _____ No _____
5. If you heard of a Negro who had bought a home or a farm, would you be glad? Yes _____ ? _____ No _____

Appendix A - continued

6. In a community in which the Negroes outnumber the whites, under what circumstances is the lynching of a Negro justifiable?
- Never
 - In very exceptional cases where a specially brutal crime against a white person calls for swift punishment.
 - As punishment for any brutal crime against a white person.
 - As punishment for any gross offense (felony or extreme insolence) committed against a white person.
 - As punishment for any act of insolence against a white person.
7. How far in our educational system (aside from trade education) should the most intelligent Negroes be allowed to go?
- Grade school _____
 - Junior high school _____
 - High school _____
 - College _____
 - Graduate and professional school _____
8. In a community where the Negroes outnumber the whites, a Negro who is insolent to a white man should be:
- excused or ignored _____
 - reprimanded _____
 - fined and jailed _____
 - not only fined and jailed, but also given corporal punishment (whipping, etc.) _____
 - lynched _____
9. All Negroes belong in one class and should be treated in about the same way. Strongly approve _____ Approve _____ Undecided _____ Disapprove _____ Strongly disapprove _____
10. Negro homes should be segregated from those of the white people. Strongly approve _____ Approve _____ Undecided _____ Disapprove _____ Strongly disapprove _____
11. Where there is segregation, the Negro section should have the same equipment in paving, water, and electric light facilities as is found in the white districts. Strongly approve _____ Approve _____ Undecided _____ Disapprove _____ Strongly disapprove _____
12. If the same preparation is required, the Negro teacher should receive the same salary as the white. Strongly approve _____ Approve _____ Undecided _____ Disapprove _____ Strongly disapprove _____
13. Practically all American hotels should refuse to admit Negroes. Strongly approve _____ Approve _____ Undecided _____ Disapprove _____ Strongly disapprove _____

Appendix A - continued

14. No Negro should be deprived of the franchise except for reasons which would also disfranchise a white man. Strongly approve _____ Approve _____ Undecided _____ Disapprove _____ Strongly disapprove _____
15. In a community of 1,000 whites and 50 Negroes, a drunken Negro shoots and kills an officer who is trying to arrest him. The white population immediately should drive all the Negroes out of town. Strongly approve _____ Approve _____ Undecided _____ Disapprove _____ Strongly disapprove _____

Appendix B

Comparison of the Results Obtained From the Application of the
Criterion of Internal Consistency and Item Analysis to the
Negro Scale for Groups A and B Combined (N=62)*

Column 1	Column 2	Column 3	Column 4	Column 5
1	.69	1.7	2	5
2	.64	1.5	6	6
3	.51	1.7	10	11
4	.18	0.4	14	14
5	.62	1.3	7	8
6	.40	0.7	11	13
7	.12	0.1	15	15
8	.39	1.1	12	10
9	.26	0.9	13	12
10	.65	2.7	5	1
11	.60	1.2	8	9
12	.54	1.4	9	7
13	.67	2.3	4	2
14	.74	2.0	1	3
15	.68	1.6	3	4

ρ (Column 4 vs. Column 5) = + .91

Column 1 - Statement numbers

Column 2 - Coefficient of correlation between the score on the individual statement and the average score on all fifteen statements.

Column 3 - Difference between the average score of the highest 9 individuals and that of the lowest 9 individuals.

Column 4 - Order of excellence as determined by item analysis based upon the coefficients of correlation shown in Column 2.

Column 5 - Order of excellence as determined by the criterion of internal consistency based upon the differences shown in Column 3.

* This table taken from Murphy and Lickert, Op. cit., p. 237.

Appendix C

Means and Standard Deviations of Groups in
Six Schools on the Negro Attitude Scale*

School	Number	Mean	σ
Columbia	100	59.40	6.09
Michigan	92	54.73	5.86
Northwestern	85	54.22	6.23
Yale	100	56.44	6.23
"A College in Virginia"	123	46.35	7.36
Oklahoma Agricultural and Mechanical College	173	50.98	6.73

* Figures for all schools except those for Oklahoma Agricultural and Mechanical College were adapted from tables in Murphy and Lickert, Op. cit., pp. 53 and 70.

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