LIBERALITY TOWARD THE NEGRO AS RELATED TO
CLASSIFICATION AND SCHOOL OF STUDY

APPROVED:

[Signatures]

Dean of the Department of Education

Dean of the Graduate School
LIBERALITY TOWARD THE NEGRO AS RELATED TO
CLASSIFICATION AND SCHOOL OF STUDY

THESIS

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

Caswell J. Dunlap
Denton, Texas
January, 1969
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>iv</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Review of Related Research</td>
<td></td>
</tr>
<tr>
<td>Statement of the Problem and Hypothesis</td>
<td></td>
</tr>
<tr>
<td>II. METHODOLOGY</td>
<td>17</td>
</tr>
<tr>
<td>Subjects</td>
<td></td>
</tr>
<tr>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>The Measuring Instrument</td>
<td></td>
</tr>
<tr>
<td>Assumptions</td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
</tr>
<tr>
<td>III. RESULTS AND DISCUSSION</td>
<td>23</td>
</tr>
<tr>
<td>Results</td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>IV. CONCLUSION</td>
<td>33</td>
</tr>
<tr>
<td>Recommendations</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>38</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Summary of Analysis of Variance for the Good-Bad Scale</td>
<td>23</td>
</tr>
<tr>
<td>II.</td>
<td>Summary of Analysis of Variance for the Worthless-Valuable Scale</td>
<td>24</td>
</tr>
<tr>
<td>III.</td>
<td>Summary of Analysis of Variance for the Dirty-Clean Scale</td>
<td>24</td>
</tr>
<tr>
<td>IV.</td>
<td>Summary of Analysis of Variance for the Insincere-Sincere Scale</td>
<td>25</td>
</tr>
<tr>
<td>V.</td>
<td>Summary of Analysis of Variance for the Foolish-Wise Scale</td>
<td>25</td>
</tr>
<tr>
<td>VI.</td>
<td>Summary of Analysis of Variance for the Ignorant-Intelligent Scale</td>
<td>26</td>
</tr>
<tr>
<td>VII.</td>
<td>Summary of Duncan's Range Test on Scale I</td>
<td>26</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

The purpose of the present study is to measure the amount of liberality of college students, freshman through graduate, in the schools of psychology and business administration at North Texas State University, toward the Negro. This purpose was accomplished through the use of a variation of the semantic differential which was developed by C. E. Osgood (14) to measure the meaning of various concepts.

Justification for such a study has to do with the present racial crisis currently manifest in the United States and the portion of responsibility for this which is shared by colleges and universities. It would in fact seem to be a function of the university to aid in diminishing prejudice in view of the ever-increasing percentage of the population receiving college degrees. Of necessity, then, a clearer understanding must be gained concerning exactly what is being done and as a result what steps should be taken to accomplish our purpose.

If, in fact, education does diminish prejudice, then there should be an inverse relationship between educational level and prejudice. With this in mind, the present study purports to offer partial information concerning the fulfillment of the aforementioned function at a specific southwestern university, and to add to the somewhat inadequate amount of existing research.
Review of Related Research

One of the first studies done relating degree of liberality and educational level was conducted at North Carolina State College by Garrison and Burch (3). The primary purpose of this research was simply to measure prejudice toward the Negro at that particular college. However, included in this study was also a breakdown of the group by classification. A list of thirty-five statements which were designed to measure prejudice, and were to be answered true or false, was administered to a group of 163 college students enrolled in psychology and sociology courses. Included in the group were fifty-three freshmen, forty sophomores, forty-seven juniors, and twenty-three seniors. In addition to finding that there was considerable anti-Negro prejudice, it was also discovered that there was "no consistent pattern or attitude that distinguishes one class from another, although on most statements the seniors are more generous or lenient toward the Negro. . ." (3, p.231).

Some support is given to the idea of liberality increasing with education in the above study, and this proposition receives a bit more weight in a study by Sims and Patrick (20). Using the Hinckly Attitude Toward Negroes Scale, and three groups of freshmen and junior-senior students: ninety-seven northern students enrolled in a northern college, 156 southern students enrolled in a southern college, and 115 northern students in a southern college, results were obtained which both support and deny a negative correlation between prejudice and
educational level. These results did not reach statistical significance, but they indicated that attitude toward Negroes changed in a negative direction from freshman to junior-senior groups for the northern students enrolled in a southern college, and attitude toward Negroes remained the same in the freshman and junior-senior groups of southern students enrolled in a southern college.

In another study conducted by Tuberville (23) at Louisiana State University, results were obtained suggesting at least a partial negative relationship between educational level and prejudice. Using a questionnaire form and a sample of 212 students, evidence was found suggesting a descending order of liberality of graduate, senior, junior, freshman, and sophomore toward the Negro. Tuberville also found that students majoring in social science were significantly more liberal than students of other majors.

Similar results were found by Stephenson (22) in an experiment conducted at Miami University. The sample consisted of freshman and senior students majoring in the schools of Arts and Science, Business Administration, and Education, and the measuring instrument was the Hinckley Attitude Toward Negroes Scale. The results indicate that in descending order of positive attitude toward the Negro, freshman education majors are first, then freshman arts and science majors and finally freshman business majors. The only statistically significant finding was in the change in attitude, in a positive direction,
from freshman to senior in the school of education. This type of change in the other two schools failed to reach significance.

Gray and Thompson (5) also found that freshmen were less liberal toward ethnic groups than seniors. This study used 400 white and 300 Negro college students as subjects, and the Bogardus Social Distance Scale as a measure of ethnic prejudice. Holzman (6), at the University of Texas, found a positive correlation between classification, freshman through senior, and scale score on the Tolerance of Non-segregation Scale, which he designed himself. A high score on this measure is indicative of a more liberal attitude toward integration. It was also noted that there was a significant difference in prejudicial attitude between the various schools within the university. The most tolerant students were those majoring in social science, and the least were those in pharmacy, followed closely by business.

Very strong evidence supporting a negative correlation between prejudice and educational level is offered by Plant (16). This was a longitudinal study extending over a period of four years, and utilizing 271 students in a test-retest design. Subjects were administered the E scale of the Public Opinion Questionnaire upon entering college, and then again as seniors. The difference was statistically significant, indicating a decline in ethnocentrism over the four-year period. It was assumed here that ethnocentrism and prejudice have a high positive relation.
Kelly, Ferson, and Holzman (10) found an inverse relation between prejudice and educational level through the use of the Desegregation Scale, a modification of the Tolerance of Non-segregation Scale by Holzman (6). In addition to this finding, it was discovered, using a random stratified sample of 606 students, that business majors had the least liberal attitude toward Negroes, and that unclassified liberal arts majors, closely followed by social science majors, had the most liberal attitude toward Negroes. These findings were again supported in a similar study by Young, Benson, and Holzman (26).

In an experiment conducted at New York University by Katsch (9), a sample of 2000 students were used, comparing ten per cent of the 2000 who had attended classes in a course entitled Racial Contributions to American Culture to the remaining members of the sample. Although the resultant data were not submitted to a sophisticated statistical technique, there appeared to be a difference in expressed prejudice which notably declined in the ten per cent.

Ilsager (8), working in Denmark, found results that suggest, as opposed to support, the proposition of prejudice modification through knowledge. The subjects were twenty-seven unemployed laborers who attended three lectures on the subject of logical positivism. A test-retest design was used by means of a questionnaire form in which various fallacies were presented. The results were that, rather than an outright denial of illogical, prejudicial statements, a change in the direction
of scepticism occurred. That is, subjects had a tendency to check "?" rather than a definite affirmative or negative statement.

In a similar study conducted at Michigan State University, Soloman and Braunschneider (21) used a sample of 2424 students divided into two groups, one beginning a course in basic biology, and the other just completing it. It was hypothesized that exposure to the scientific method, or the objectivity of this method, would diminish prejudice appreciably. When the data was computed, the results were found to be statistically significant favoring the hypothesis.

Administering an experiment for UNESCO, Saenger (18) distributed pamphlets designed to expose racial myths to students enrolled in freshman psychology and sociology courses. Using a projective instrument, a decrease in prejudicial attitudes was discovered in all students. However, the most significant decrease was noted in those subjects rated low on prejudice before the reading of the pamphlets.

Photiadis (15), using a church group, attempted to correlate education with personality variables which presumably, according to the degree of their presence, indicate prejudicial attitudes. These variables were orthodoxy (the assumption being that the more orthodox church goers are more prejudiced), extrinsic--intrinsic beliefs (assuming here that extrinsic beliefs suggest prejudice, while intrinsic beliefs suggest the lack of it), anomia, status concern, conservatism, authoritarianism, withdrawal tendencies, and antisocial tendencies.
There was a significant negative correlation between education level and each of the personality variables.

Another study which is somewhat indirectly related to the effect of education level on prejudice was conducted by Dodd and Strong (2). A sample of ninety-seven freshman elementary education majors were evaluated in terms of their score on the Prejudice Scale of the Minnesota Multiphasic Personality Inventory and their social--academic adjustment in college. A significant correlation was found between low Pr. score and good to excellent social--academic adjustment, and between high Pr. score and poor social--academic adjustment. These results are relevant to the present study only if it can be assumed that academic adjustment means that the student is accepting what he is being taught.

Finally, a somewhat vague study, at least for the purpose of the present study, was conducted by Hunter (7). A questionnaire designed to detect prejudice was distributed to eight groups, consisting of forty subjects each. Only four of these groups are relevant to the present study, and they are students enrolled in psychology courses at Columbia College and at the University of North Carolina, and a sample of northern and southern adults. From the results of the questionnaire, a good will scale was formed. This scale ranked groups from most good will toward the Negro to least good will toward the Negro in descending order. The results showed that Columbia College students had the most good will toward the Negro,
followed by the northern adults, then the University of North Carolina students, and finally the southern adults. This suggests, sectional bias accepted, that education does make some difference in prejudicial attitude.

The above works all indicate at least a slight negative correlation between prejudice and educational level. However, there are several other studies which suggest a direct contradiction. The first of these was conducted by Young (25) at the University of Pennsylvania where he taught a course on race relations. He noticed that there was a difference in the grades students were receiving and their actual attitude toward other races. To test his observation, Young instructed two separate groups of students beginning the course to rank races in order of superiority. The same instructions were given in a retest at the end of the semester. From the information collected and correlated it was obvious that there had been little or no change in attitude.

In a study similar to the aforementioned work by Soloman and Braunschneider (21), Gilbert (4), working with high school students, found results which discredit the contention of an inverse relation between prejudice and education. Six hundred students enrolled in a science course were tested at the beginning of the school year and again near the end. It was assumed that instruction in science would enable the pupil to ignore his prejudices to some extent. However there was no significant difference in the test-retest data.
Langhorne (11), using a sample of 311 western college students and 697 southern college students, and a questionnaire form, discovered that there was little consistent difference between attitudes of the seniors and attitudes of the freshmen toward the Negro. Also he found that sex had very little to do with prejudiced attitudes.

Another study conducted by Samelson (19) with a sample of 2523 white persons purports to be representative of the population of the United States, and yields data on the liberalizing effects of education. The information was obtained through a direct interview method, and represents levels of education from grammar school through college. The findings were that "The influence of general education, although present, is less marked in answers to questions which ask the respondent to state his attitudes toward various rights of Negroes, and his personal attitudes and feelings in respect to social equality" (19, p. 11).

Myers (13), using college students at a teachers college found some rather surprising results. In a test-retest design on the third and eighth class periods in a course on educational psychology, an effort was made to determine the effects of knowledge on prejudice. He reports that "On the whole the second check shows a change from more liberal to less liberal on the part of the white students" (13, p. 712). Although these results were explained on the basis of social desirability set and mistakes, these findings suggest that education further entrenches prejudice.
Working with a portion of the New York City Mayor's Committee's study on precinct unity, Chein and Lake (1) obtained some information concerning the relation of prejudice and education. There were 212 respondents who were asked to answer questions concerning other races. Of these 212 subjects, thirty-eight to forty had attended college, and this particular section received the highest educational rating in New York City. The findings were that "...higher percentage of people with more formal education is to be found among those with a greater number of prejudices than that for the group as a whole" (1, p. 374).

McNeil (12), using a sample of fifty high school sophomores and fifty seniors, obtained similar results on both an immediate measure and a test-retest longitudinal study. Both groups were required to fill out a sentence completion test designed for sensitivity to negative feelings for minority groups, and the sophomore group were required to again fill out the same form when they became seniors. With the immediate measure, the seniors were found to have "more than double" the amount of negative feelings toward minority groups than the amount obtained from the sophomores. When the original sophomores were retested the amount of prejudice was found to have generally remained stable or increased.

In an experiment by Rice and White (17), competitive behavior in a game situation with a concealed, but imaginary, white or Negro opponent was used as a measure of prejudice.
Twenty female college juniors and twenty female clerical workers were acquainted with the game, and then informed that their opponent was either white or Negro. A significant difference was found in competitive behavior when calculated in terms of the race of the opponent, but the difference was not significant when calculated in terms of the educational difference.

Finally, in a study by Wieder (24), results were found indicating that it is the teaching method, rather than education per se, that is the influential variable in reducing prejudice. A test-retest design was employed, using the Minnesota Multiphasic Personality Inventory, the California Opinion Study--scales E and F, and the Index in Adjustment in Values to measure prejudice in two college classes. The control group was taught by the traditional lecture--discussion method, and the experimental group was taught by means of a group therapy technique--psychodrama. It was found that the experimental group had a significant positive change in attitude--a reduction of prejudice, while the control failed to reach significance.

**Statement of the Problem and Hypothesis**

From the foregoing material it can be readily seen that there exists much contradiction in the literature concerning the function of education in the increase of liberality toward the Negro. However, the cause of this discrepancy could be any number of extraneous variables which would be virtually
impossible to isolate. Therefore, the solution would seem to be more and increasingly better research, hoping that through this an answer will emerge.

With the current trend toward more and more specialization in jobs, a college education is no longer, more or less, a single entity. That is, college graduates are no longer simply educated men but psychologists, accountants, physicists, etc. This means that presently it is entirely possible to obtain a college degree in one field without ever experiencing any of the knowledge another field has to offer. This, then, could be the explanation for the discrepancy in the literature. Rather than specifying college or non-college graduates or classifications at the beginning and end of college, it would be necessary to delineate a specific major field of study.

It would seem logical that if one were not exposed to the empirical facts, one could hardly be expected to be cognizant of them. For this reason, the present study will examine the relationship of the degree of liberality expressed toward the Negro in the areas of business administration and psychology. Since education in general should have some diminishing effect on prejudice, but also feeling that direct exposure to data indicating racial equality will have a more prominent effect, the following is hypothesized.

1. There will be a significant difference between psychology and business majors on each scale with psychology majors being more liberal.
2. There will be no interaction between the variables of major study and classification.

3. There will be a positive correlation between classification and liberality toward the Negro.

4. There will be a difference in liberality between classifications.
CHAPTER BIBLIOGRAPHY


22. Stephenson, Chester M., "The Relation Between the Attitude Toward Negroes of White College Students and the College or School in which They are Registered," *The Journal of Social Psychology*, 36 (November, 1952), 197-204.


CHAPTER II

METHODOLOGY

Subjects

The subjects for the present study were 100 college students selected from the first and second summer sessions in 1968 at North Texas State University. Ten were selected from each classification, freshman through graduate (graduate referring to those students in the process of obtaining a master's degree), in the schools of psychology and business administration. These subjects were chosen regardless of sex, which is justified by evidence from the aforementioned studies by Langhorne (2) and Kelly, Person, and Holzman (1). In fact, all variables, other than classification and major, were disregarded.

Procedure

The procedure was to distribute one sheet of paper, containing a variation of the semantic differential which was headed by the concept, "A Negro Person". This particular scale was borrowed almost verbatim from a study conducted by Nunnally (3) and the instructions used were almost exactly like those in an experiment by Osgood (4, pp. 82-84). The instructions were read aloud and illustrated on a black board, and were as follows.
Do not put your name on the scale—only your classification and major.

The purpose of this study is to measure the meaning of certain things to various people by having them judge them against a series of descriptive scales. In taking this test, please make your judgements on the basis of what these things mean to you. On the paper you have before you, you will find a concept to be judged and beneath it a set of scales. You are to rate the concept on each of these scales in order.

Here is how you are to use these scales: If you feel that the concept at the top of the page is very closely related to one end of the scale, you should place your check mark as follows:

\[ X \quad \quad \quad \quad \quad \quad \quad \]

or

\[ \quad \quad \quad \quad \quad \quad \quad X \]

If you feel that the concept is quite closely related to one or the other end of the scale, but not extremely, you should place your check mark as follows:

\[ \quad \quad \quad \quad \quad \quad \quad X \]

or

\[ \quad \quad \quad \quad \quad \quad \quad X \]

If the concept seems only slightly related to one side as opposed to the other side, but not really neutral, then you should check as follows:

\[ \quad \quad \quad \quad \quad \quad \quad X \]

or

\[ \quad \quad \quad \quad \quad \quad \quad X \]

The direction toward which you check, of course, depends upon which of the two ends of the scale seem most characteristic of the things you are judging.

If you consider the concept to be neutral on the scale, both sides of the scale equally associated with the concept, or if the scale is completely irrelevant, unrelated to the concept, then you should place your check mark in the middle space:

\[ \quad \quad \quad \quad \quad \quad \quad X \]

It is important that you place your chock marks in the middle of the spaces, and not on the boundaries. Be sure you chock every scale and do not omit any. Never put more than one chock mark on a single scale.

Work at a fairly high speed through this test. Do not worry or puzzle over individual items. It is your first impression, the immediate feelings about the item, that we want. On the other hand, please do not be careless, because we want your true impressions. Please be honest as your individual answers will not be known.

The Measuring Instrument

The instrument used to measure prejudice was, again, a variation of the semantic differential. As described by Osgood, Suci, and Tannenbaum (4), it consists of three factors each of which contain several bipolar adjective scales. The factors consist of an evaluative measure, exemplified by such bipolar adjectives as good--bad, valuable--worthless, pleasant--unpleasant, a potency measure exemplified by such adjectives as strong--weak, large--small, heavy--light, and an activity measure characterized by adjectives such as active--passive, fast--slow, hot--cold.

By having an individual rate a concept according to the above bipolar adjectives on a seven point scale, a measure of the connotative meaning of the concept is obtained for the individual. That is, the meaning a word or concept has for the individual aside from the generally accepted definition.

In an attempt to validate the above assumption, attitudes toward three objects, the Negro, the church, and capital punishment, were measured by the respective Thurston scales and
the evaluative factor of the semantic differential. The resultant correlations ranged from .74 to .82 (4, pp. 193-194).

Correlating Guttman scale scores and the evaluative factor of the semantic differential on attitudes toward crop rotation, a coefficient of .78 was obtained (4, p. 194). Also the evaluative factor was found to distinguish between those scoring high and those scoring low on the California F scale when measuring attitudes toward ethnic objects (3, p. 169).

With regard to reliability, Tannenbaum (4, p. 192), using the evaluative factor of the semantic differential in a test-retest design, found correlations ranging from .87 to .93 for the concepts Labor Leaders, the Chicago Tribune, Senator Robert Taft, Legalized Gambling, Abstract Art, and Accelerated College Programs.

Finally, in studying prejudice, Proenza (5, p. 280) concluded that:

In the main, the use of the evaluative-differential scales appears to give a more definite measure of underlying attitudes than do relatively simple measures of prejudice. The use of the semantic differential seems to be appropriate for a study of prejudice because of consistent, significant relationships between certain of the concepts and ratings on the Bogardus scale. (5, p. 280)

The particular variation of the original test which was used in the present study consisted of six, seven point bipolar adjective scales representing the evaluative factor of the semantic differential. One concept (A Negro Person) was rated on the bipolar adjective scales: bad--good, dirty--clean,
worthless--valuable, insincere--sincere, foolish--wise, and ignorant--intelligent.

Assumptions

The present study makes two major assumptions and to the degree that these assumptions are not fulfilled, the study is lacking in validity.

The first assumption is that the instrument used is, in actuality, measuring prejudice. This assumption would appear valid in view of the aforementioned validity studies.

The second assumption is that the sample, which is not strictly random, is representative of the population. This second assumption has some validity due to the stratified nature of the group.

Statistics

It was assumed, after assigning numerical coefficients of one through seven to each of the seven digits between the bipolar adjectives, that the higher the score, the higher the degree of liberality toward the Negro. From the resultant data, a $2 \times 5$ analysis of variance was conducted for each of the six scales on the independent variables—major study and classification (freshman through master's level graduate). In addition to the analysis of variance, the combined means of each classification were submitted to a rank difference correlation to determine the relationship between liberality and classification.
CHAPTER BIBLIOGRAPHY


CHAPTER III

RESULTS AND DISCUSSION

Results

As indicated in Tables I through VI, a significant difference was found between psychology and business majors on two of the six scales. This difference (p < .01 and p < .05) was found on the Worthless--Valuable scale and the Insincere--Sincere scale respectively, which suggests that the psychology majors are more liberal toward the Negro than are the business majors. The remaining four scales failed to reach an acceptable level of significance.

TABLE I

SUMMARY OF ANALYSIS OF VARIANCE FOR THE
GOOD--BAD SCALE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Major</td>
<td>.6400</td>
<td>1</td>
<td>.6400</td>
<td>.6180</td>
</tr>
<tr>
<td>Between Classification</td>
<td>11.5000</td>
<td>4</td>
<td>2.8750</td>
<td>2.7762*</td>
</tr>
<tr>
<td>Interaction M X C</td>
<td>2.6600</td>
<td>4</td>
<td>.6650</td>
<td>.6421</td>
</tr>
<tr>
<td>Within Groups</td>
<td>93.2000</td>
<td>90</td>
<td>1.0355</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>108.0000</td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
### TABLE II

**SUMMARY OF ANALYSIS OF VARIANCE FOR THE WORTHLESS--VALUABLE SCALE**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Major</td>
<td>11.5600</td>
<td>1</td>
<td>11.5600</td>
<td>7.2653***</td>
</tr>
<tr>
<td>Between Classification</td>
<td>14.4400</td>
<td>4</td>
<td>3.6100</td>
<td>2.2688</td>
</tr>
<tr>
<td>Interaction M X C</td>
<td>3.8400</td>
<td>4</td>
<td>.9600</td>
<td>.6033</td>
</tr>
<tr>
<td>Within Groups</td>
<td>143.2000</td>
<td>90</td>
<td>1.5911</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>173.0400</td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < 0.01**

### TABLE III

**SUMMARY OF ANALYSIS OF VARIANCE FOR THE DIRTY--CLEAN SCALE**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Major</td>
<td>3.6100</td>
<td>1</td>
<td>3.6100</td>
<td>2.5971</td>
</tr>
<tr>
<td>Between Classification</td>
<td>7.4300</td>
<td>4</td>
<td>1.8350</td>
<td>1.3201</td>
</tr>
<tr>
<td>Interaction M X C</td>
<td>6.5400</td>
<td>4</td>
<td>1.6350</td>
<td>1.1762</td>
</tr>
<tr>
<td>Within Groups</td>
<td>125.1000</td>
<td>90</td>
<td>1.3900</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>142.5900</td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE IV

SUMMARY OF ANALYSIS OF VARIANCE FOR THE
INSINCERE--SINCERE SCALE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Major</td>
<td>7.8400</td>
<td>1</td>
<td>7.8400</td>
<td>4.7740*</td>
</tr>
<tr>
<td>Between Classification</td>
<td>8.7400</td>
<td>4</td>
<td>2.1850</td>
<td>1.3305</td>
</tr>
<tr>
<td>Interaction M X C</td>
<td>2.6600</td>
<td>4</td>
<td>0.6560</td>
<td>0.4949</td>
</tr>
<tr>
<td>Within Groups</td>
<td>147.8000</td>
<td>90</td>
<td>1.6422</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>167.0400</td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.05

TABLE V

SUMMARY OF ANALYSIS OF VARIANCE FOR THE
FOOLISH--WISE SCALE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Major</td>
<td>0.6400</td>
<td>1</td>
<td>0.6400</td>
<td>0.4304</td>
</tr>
<tr>
<td>Between Classification</td>
<td>9.1400</td>
<td>4</td>
<td>2.2850</td>
<td>1.5369</td>
</tr>
<tr>
<td>Interaction M X C</td>
<td>4.0600</td>
<td>4</td>
<td>1.0150</td>
<td>0.6827</td>
</tr>
<tr>
<td>Within Groups</td>
<td>133.8000</td>
<td>90</td>
<td>1.4866</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>147.6400</td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE VI

SUMMARY OF ANALYSIS OF VARIANCE FOR THE
IGNORANT--INTELLIGENT SCALE

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Major</td>
<td>1.4400</td>
<td>1</td>
<td>1.4400</td>
<td>.8339</td>
</tr>
<tr>
<td>Between Classification</td>
<td>4.8000</td>
<td>4</td>
<td>1.2000</td>
<td>.6949</td>
</tr>
<tr>
<td>Interaction M X C</td>
<td>5.3600</td>
<td>4</td>
<td>1.3400</td>
<td>.7760</td>
</tr>
<tr>
<td>Within Groups</td>
<td>155.4000</td>
<td>90</td>
<td>1.7266</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>167.0000</td>
<td>99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results, with the exception of the first scale (Bad--Good), concerning differences between the various classifications were found to be non-significant, and this was also the case for interaction among variables.

With regard to the significant $F (p < .05)$ found between classification on the first scale, Duncan's Range Test was conducted to determine between which of the groups there was a difference.

TABLE VII

SUMMARY OF DUNCAN'S RANGE TEST ON SCALE I

<table>
<thead>
<tr>
<th>Group</th>
<th>Juniors</th>
<th>Freshmen</th>
<th>Seniors</th>
<th>Sophomores</th>
<th>Graduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.90</td>
<td>4.10</td>
<td>4.55</td>
<td>4.70</td>
<td>4.75</td>
</tr>
</tbody>
</table>
The results of Table VII suggest that on the first scale (Bad—Good) there was no significant difference between senior, sophomore, and graduate students in the schools of psychology and business in degree of liberality toward the Negro. However, there was a significant difference ($p < .05$) between juniors and freshmen and juniors and senior, sophomore, and graduate students. Also, there was a significant difference between freshmen and senior, sophomore, and graduate students. That is, the senior, sophomore, and graduate students had mean scores which were not significantly different from the mean scores of either the freshmen or the juniors. Also, the freshmen had a significantly higher mean score than the juniors.

Finally, the means of both majors were combined in each of the respective classifications and on each scale to obtain a rank-difference correlation coefficient. This resulted in a positive correlation of .70 which suggests that at least to some degree liberality toward the Negro tends to increase with academic advancement.

The means used to obtain the above mentioned rank-difference correlation were in ascending order: freshman—4.53, junior—4.62, senior—5.02, sophomore—5.17, and graduate—5.27. With one exception, it can be seen that there is a steady rise with classification.

With regard to the hypotheses, the foregoing results lend support to the second and third, but negate the first and fourth. That is, as hypothesized, there was no significant interaction
between the two variables of major and classification and liberality toward the Negro. However, contrary to the first hypothesis, there was no significant difference between psychology and business majors on each scale, and there was no difference in liberality between classifications.

Discussion

If it is considered that, due to the nature of the subject matter, students taking psychology courses are exposed to direct empirical evidence which strongly supports racial equality, and that this evidence is not presented in business courses, then the first hypothesis should hold. The negation of the first hypothesis—there is a difference in liberality toward the Negro between psychology and business majors—would imply a discrepancy between intellect and affect. In other words, regardless of the empirical truth or falsity of an idea, the action that is taken concerning this idea is governed by "how I feel" or emotion.

This finding could be due to several things. It could be that the present study was contaminated due to business majors being exposed to somewhat similar material as psychology majors while taking electives in psychology or related social sciences. On the other hand, it is possible that rather than subject matter, teaching method as suggested in a study by Wieder (1), or the attitude of the instructor is the prime determinant. That is, it is possible that although facts are presented, the instilling of a sense of involvement is neglected.
It will also be noticed that although the first hypothesis was generally negated, there were two exceptions. That is, on the Worthless--Valuable scale and the Insincere--Sincere scale there was a significant difference ($p < 0.01$ and $p < 0.05$, respectively) between majors, with psychology majors being more liberal toward the Negro. Since all six scales are included under one, relatively pure factor, these two exceptions are somewhat difficult to explain. It is possible, however, that on these two scales there is a difference in reference for the respective majors. Whereas psychology majors could feasibly have been thinking in humanistic terms, the business majors could have been thinking in terms of employability or in monetary terms.

Turning now to the second hypothesis—there will be no interaction between the variables of major and classification—no significant interaction was found, and therefore it was supported. That is, liberality toward the Negro in psychology majors and business majors is not affected by their particular classification.

The third hypothesis—there will be a positive correlation between classification and liberality toward the Negro—was supported. That is to say, that to a certain extent (correlation of $0.70$) as educational level increases, so does liberality toward the Negro. It will be noticed that the correlation coefficient was reduced as a result of the high mean score by the sophomore groups. This could possibly be the result of an
inflation in idealism and/or ego characteristic of second year college students and is personified in the term sophomoric.

Finally, with regard to the fourth hypothesis there will be a difference in liberality between classifications there was found only one such significant difference, and as a result the hypothesis was rejected. This, in combination with the third hypothesis would suggest that although there is a positive correlation between educational level and liberality, the relationship is not significant. Taken as a whole, this indicates that five years of higher education do not appreciably increase liberality toward the Negro, remembering of course the limits of the present study.

It would seem that the reason for the failure of the fourth hypothesis could be similar to the explanation for the failure of the first hypothesis. The method of presenting facts regarding racial equality, or the failure to recognize these facts may explain why, as in the first hypothesis, psychology majors are not significantly more liberal than business majors, and as in the fourth hypothesis, there is not a significant difference in liberality between classifications.

Concerning the aforementioned exception to the fourth hypothesis, a significant difference was found in liberality between classifications on the first scale (Bad--Good). Using Duncan's Range Test it was found that juniors were significantly different from the other four groups, freshmen were significantly different from the other four groups, and that there was not
a significant difference between seniors, sophomores, and graduates, but these later three groups were significantly different from both juniors and freshmen (See Table VII). The ascending order of the group was junior, freshman, senior, sophomore, and graduate.

Although there are significant differences, there is no consistent order. Also as in the exceptions to the first hypothesis, it is difficult to understand why there is a significant difference on the first scale and no difference on the other five scales, considering they are all included within the evaluative factor of the semantic differential. It would appear that aside from being significantly different, the results of the Duncan's Range Test are inexplicable.
CHAPTER BIBLIOGRAPHY

CHAPTER IV

CONCLUSION

In fulfillment of the original purpose of the present study, several results are offered. With regard to the relationship between education and degree of liberality toward the Negro at North Texas State University, evidence suggests that there is only a slight difference between the schools of psychology and business administration. Although this difference is not statistically significant, it suggests a higher degree of liberality in the school of psychology. Concerning the concurrent rise in classification and liberality toward the Negro, evidence suggests a positive rank-difference correlation. However, this difference is not statistically significant.

With reference to related research, the present study offers additional data. The results on the rank-difference correlation, not being significant, lend only slight support to those studies cited in the related literature section which obtained results suggesting a positive relationship between psychology and business majors with regard to tolerance and educational level. On the other hand, the results of the analysis of variance which evidenced no significant difference in tolerance between the respective majors offer a direct contradiction to the findings of Tuberville and Hide (4); Young, Benson, and Holzman (6); Kelly, Ferson, and Holzman (2); and Holzman (1).
However, it may be possible to explain this contradiction on the basis of the sample and/or the test used in the present study. It is entirely possible that the sample used was not representative of the intended population. This could be a result of the transient nature of the summer session enrollment and/or the lack of a strictly random selection of subjects. Also it is possible, due to some seemingly inexplicable results, that the test which was employed, the evaluative scale of the semantic differential, did not represent a pure factor and thereby was not a true measure of liberality toward the Negro.

Recommendations

First, with regard to the test and procedure, it is recommended that the complete semantic differential, using each of the evaluative, potency, and activity factors, be administered to subjects. Also it is recommended that two concepts, such as "A White Person" and "A Negro Person", be evaluated with the resultant difference score for each subject being used as a measure of prejudice. These two suggestions add clarity to the somewhat hazy relationship between education and degree of liberality.

Second, as to what steps could be taken at North Texas State University, or any institution of higher learning, to increase liberality (used to mean a decrease in prejudicial feelings), it is recommended that serious consideration be given by instructors and administrators to the introduction into the curriculum of a course similar to that suggested in
the studies conducted by Wieder (5) and Mann (3). This recommendation is referring to an educational technique based on the principles of group counseling.

Summary

The purpose of the present study is to measure the amount of liberality of college students, freshman through master's level graduate, in the schools of psychology and business administration at North Texas State University.

A hundred subjects were selected, fifty from each school of study. They were then subdivided into ten groups according to classification and school of study. The evaluative factor of the semantic differential was administered to each subject with instructions to rate the concept "A Negro Person" in terms of six bipolar adjective scales separated by seven points.

It was hypothesized that first there would be a significant difference between psychology and business majors on each scale--psychology majors being more liberal. Second, there would be no interaction between variables of major study and classification. Third, there would be a positive correlation between classifications and liberality toward the Negro. Fourth, there would be a difference in liberality between classification.

The data were submitted to a 2 X 5 analysis of variance and a rank-difference correlation. These manipulations resulted in the rejection of the first and fourth hypotheses, and the acceptance of the second and third hypotheses. The two
negated hypotheses were accounted for by teaching technique and possibly the lack of control over elective courses taken by the subjects. It was recommended that a semantic differential including all three factors would clarify the relationship between education and liberality toward the Negro. Also, it was recommended that a teaching technique based on group counseling would promote liberality.
CHAPTER BIBLIOGRAPHY


BIBLIOGRAPHY

Books


Articles


Holzman, Wayne H., "Attitudes of College Men Toward Non-Segregation in Texas Schools," Public Opinion Quarterly, XX (Fall, 1956), 559-569.


Langhorne, Maurice C., "Sectional Differences in the Answers of College to Questions on Race," *Journal of Social Psychology*, 16 (August, 1912), 89-98.


Plant, Walter T., "Changes in Ethnocentrism Associated with a Four Year College Education," *Journal of Educational Psychology*, 49 (June, 1958), 162-165.


Stephenson, Chester M., "The Relation Between the Attitude Toward Negroes of White College Students and the College or School in which They are Registered," *The Journal of Social Psychology*, 36 (November, 1952), 197-204.


Unpublished Materials