THE EFFECTS OF AN INFORMATIONAL BRIEFING ON THE ATTITUDES OF CERTAIN HIGH SCHOOL SENIORS IN THE DALLAS-FORT WORTH METROPOLITAN AREA TOWARD THE AIR FORCE ROTC TRAINING PROGRAM

THESIS

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

For the Degree of

MASTER OF JOURNALISM

By

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This study was a simple "before" and "after" attitude measurement experiment using an experimental group and a control group.

The attitude measurements were made before and after the subjects in the experimental group were presented an informational briefing about the Air Force ROTC training program. Both the experimental group and the control group were subject to exposure to the Air Force mass communication advertising during the two-month study period.

The results indicate that the increased knowledge gained by the experimental group through its exposure to the informational briefing caused a negative change of attitude within the group. However, the control group had no significant change of attitude during the study period even though more than 87 percent of those subjects were exposed to some form of Air Force advertising.
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CHAPTER I

INTRODUCTION

With the coming of an all-volunteer military force in the United States, the burden of persuading young people to join the military will fall eventually on the informational branches of the various services.

In recent years, the Air Force has functioned as an all-volunteer service, but the threat of being drafted into one of the other services has been a motivational factor in persuading young men to volunteer for Air Force duty. Therefore, with the elimination of the draft, the Air Force will be forced into competition with the non-military business world for the top young college graduates for its officer corps (3, 12).

According to information released by Air Force Reserve Officer Training Corps (AFROTC) at Maxwell AFB, Alabama, 47 percent of the officers entering the Air Force in fiscal year 1971 were commissioned through the AFROTC training program; therefore, it seems obvious that the Air Force must encourage high school graduates to continue to enroll and complete the AFROTC program at the college level.

Since the researcher is presently a captain in the Air Force and will soon enter the Air Force information field,
he has a personal interest in the methods to be used in future Air Force advertising campaigns to influence high school seniors to become involved in the college ROTC program.

The researcher believes the Air Force must change its advertising program from the present attempt to simply create interest among high school students to a program designed to inform the students of the benefits and requirements of the college-level ROTC program. A recent study found that more than 60 percent of the high school seniors surveyed had little or no knowledge about the ROTC program. The researchers suggested in the study that this lack of information "may be attributed to the absence of anyone with sufficient knowledge of the ROTC programs ever speaking to these youths" (3, p. 118).

It is the aim of this study to provide additional data to the general body of knowledge on attitude change as affected by increased knowledge of the attitude subject, but more specifically to determine whether increased knowledge about the benefits and requirements of the Air Force ROTC program will create more positive attitudes than presently exists among high school seniors toward the ROTC program.

Basic Design of the Study

The basic design of this study is that of a simple "before" and "after" attitude measurement experiment using
an experimental group and a control group. The measurements in this study were made before and after the experimental group was presented an informational briefing about the Air Force ROTC training program.

Two groups of high school seniors were used as subjects in the study. One group, referred to as the exposure group, was exposed to the informational briefing presented by two Air Force ROTC cadets from North Texas State University. The other group, the non-exposure group, was not presented any briefings about the ROTC program.

The non-exposure group actually performed a dual function in the study. Its primary role was to act as a control element for the experiment, which some authorities consider to be a necessity in attitude change experiments (14, p. 217). Secondarily, the group served as the source of information on the effects of mass communication advertising conducted by the Air Force during the two-month study period.

The exposure group was made up of senior students from a suburban school, Grand Prairie High School (GPHS), and a rural school, Decatur High School (DHS). The non-exposure group consisted of senior students from a suburban school only, North Mesquite High School (NMHS).

All three schools are located in the Dallas-Fort Worth metropolitan area; therefore, all of the students were subject to the same mass media channels of communication used by the Air Force during the two-month study period.
According to Air Force ROTC admissions personnel, television, radio, and various types of print media were used to present the ROTC message during the study period.

At the beginning of the study, both the exposure and the non-exposure groups were administered an attitude scale to measure the attitude of the students toward the college-level Air Force ROTC training program.

After the attitudes of both groups were measured, an informational briefing was presented to the exposure group only. However, it is assumed that throughout the entire study period both the exposure and the non-exposure groups were subject to exposure to Air Force mass communication advertising.

Approximately two months after the first test was given, the attitude scale was administered again to the two groups to determine if any change in attitude toward the Air Force ROTC program occurred in either or both groups.

Statement of the Problem

The problem in this study was to determine the attitude of certain high school seniors toward the Air Force ROTC program and the possible attitude change of those students when they are exposed to Air Force mass communication advertising and an informational briefing about the ROTC training program.
Purposes of the Study

The purposes of this study are

(1) to measure the existing attitude of certain high school seniors toward the Air Force ROTC program,

(2) to evaluate the effect of Air Force mass communication advertising on those students, and

(3) to evaluate the effect on certain students of an informational briefing about the benefits, advantages, disadvantages, and requirements of the college-level Air Force ROTC program when presented in addition to the Air Force mass communication advertising.

Definition of Terms

For the purposes of this study the following definitions have been formulated:

Exposure group--those students who were exposed to the informational briefing presented by AFROTC cadets from North Texas State University in addition to Air Force mass communications advertising.

Non-exposure group--those students who were not exposed to any Air Force ROTC briefings, but rather were subject to exposure to Air Force mass communications advertising only.

Attitude--a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence (acquisitive or avertive, favorably or unfavorably,
positively or negatively) upon the individual's response to all objects and situations with which it is related (1, p. 8).

**Measured attitude**—the mathematical value determined by the attitude scale developed for this study (Appendix D).

**Attitude change**—the mathematical difference between the measured attitude at the beginning of the study and the measured attitude at the end of the study.

**Minority students**—all Negro, Mexican-American, or other non-Caucasian students participating in the study.

**Suburban students**—those students attending a secondary school located in a community which is part of a large metropolitan area and in which the primary source of income is derived from sources other than farming or ranching.

**Rural students**—those students attending a secondary school located in a town of fewer than 5,000 people in which the primary source of income is derived from farming or ranching.

**Limitations**

The scope of this study shall be limited to only those students participating in the study, and they will not be considered as typical of high school seniors anywhere other than the schools from which they were selected.

**Basic Assumptions**

It is assumed those students completing the attitude scale responded correctly. It was also assumed that a
majority of the students would be exposed to Air Force mass communication advertising during the time period of the study.

Recent and Related Studies

Journalism abstracts and research guides abound with studies dealing with attitude and attitude change. However, there have been two recent studies conducted which directly relate to this study. Both studies were master's thesis research projects.

In 1965, a study entitled "ROTC and the University Freshman: An Attitude Survey and a Public Relations Program to Increase Enrollment" was done by Helmuth O. Froeschle at the University of Wisconsin. This study concluded that the family and the school were the leading means for communicating the Armed Forces message, and that the mass media, although reinforcing attitudes, did not appear to attract men to enroll in the ROTC program.

The study was based on a sample survey of 978 young men who had been accepted for admittance into the University of Wisconsin as of June 1, 1964. The sample was taken from a population of 1,584 resident applications and 747 non-resident applications (4, pp. 28, 29).

The sample population consisted of 580 resident students and 398 non-resident students, each of whom was mailed a lengthy questionnaire about the military service and the ROTC
training program. From the 978 questionnaires which were mailed Froeschle received 802 responses. These responses represented a return rate of 82 percent (4, p. 33).

The data collected by the questionnaire were analyzed and a public relations program was suggested. The suggested public relations program was based on the information obtained in the study.

For the purposes of his study Froeschle formulated ten hypotheses, but only two of these are directly related to this study. The first of these predicted "that the young men with the greater knowledge about and exposure to the armed forces is more likely to be favorable to ROTC" (4, p. 35). It should be noted, however, that the data collected by Froeschle were insufficient to ascertain the relevancy of this hypothesis (4, p. 59).

The second hypothesis of interest to this study dealt with the influence of geographic environment on an individual's attitude toward ROTC. Froeschle hypothesized "that the young man from a smaller community . . . is more likely to be favorable to ROTC" (4, p. 35). Although this hypothesis is strongly supported by past participation in the military by rural residents (7, p. 85), the data collected by Froeschle neither supported nor rejected this hypothesis (4, pp. 49, 50).

Froeschle proposed that any public relations program for the ROTC program must strive for "the creation of a
better public understanding . . . and awareness of the (ROTC) program and what it has to offer . . . " (4, p. 108). He contends this increased awareness of the program is necessary in order for high school students to have the "means for evaluating the opportunities available" to them (4, p. 134).

Although the idea of creating a better understanding of the ROTC program and what it has to offer is only a minor aspect of the overall program recommended by Froeschle, it is the part of the program which will be further tested by this study.

Another study similar to Froeschle's was conducted in 1969 at the University of Missouri by Thomas J. Turner III. Turner's study, entitled "Avenues for Improving Attitudes of Prospective Members Toward Army ROTC," also concluded that the family and the school are the two most influential factors in establishing attitudes toward ROTC.

Turner's study found evidence to support Froeschle's conclusion that one's knowledge affects his attitude toward the ROTC program. Turner reported that his data "indicated that the more military training one receives, the more positive his attitudes toward it" (11, p. 197).

Q-sort techniques were utilized by Turner to determine the attitudes of fifty male subjects, which included sixteen high school seniors, twenty-four college students, and ten military personnel. Each subject was asked to sort sixty-one statements using standard Q-sort procedures.
From the data collected, Turner concluded that "high schoolers don't have nearly enough information about the (ROTC) program." He further concluded that the "ROTC's main public relation-information efforts should be directed at the high schools" (11, p. 188).

Other Froeschle findings are supported by Turner. He suggested that the best way to convey the ROTC message is through "personal contact between those knowledgeable about ROTC, either cadets, high school counselors or Army officers, and those eligible for ROTC, both high school seniors and university students" (11, pp. 189, 190).

Like Froeschle, Turner did not test this conclusion, but he suggested that additional research be conducted to determine "the effects of individual kinds of publicity used by ROTC, such as posters, TV spots, and lectures ..." (11, p. 200).

Both of these studies concluded that a lack of knowledge about the ROTC program has a negative effect on high school students' attitudes toward the program, and it was suggested that personal contact through lectures or briefings might be an effective method of informing prospective ROTC members about the program. This study will attempt to determine the validity of these conclusions and suggestions.

Other studies have shown that high school seniors are lacking in background information and knowledge about the military service and its benefits. A 1969 study conducted by
the Institute for Social Research at the University of Michigan found that high school seniors were misinformed about several aspects of military service and that most of the young men tested were better informed about the Selective Service system than about the requirements or benefits of the military (6, pp. 12, 13). This study also found that "a substantial minority--twenty per cent or so--" of the more than 2,000 boys surveyed indicated strong anti-military attitudes (6, p. 5).

A 1971 study conducted by N. W. Ayer & Sons, Inc., also found a considerable lack of knowledge about the ROTC program among high school seniors. In fact, more than 60 percent of the subjects indicated no one had ever spoken to them about the ROTC program (3, p. 118).

Each of these studies indicated that high school seniors, the audience of the greatest interest to ROTC recruiters, are poorly informed about the military and the ROTC program. Both the Froeschle and Turner studies suggest that personal contact is the most effective channel to communicate with prospective ROTC students; in fact, they suggest that personal contact is the basic element in creating more positive attitudes among high school students toward the ROTC program.

In addition to the studies directly related to the ROTC program, there are numerous psychological studies which are directly related to the design of this study. Indeed, most
of the research conducted in the area of attitude and attitude change has been done by psychologists.

For the purposes of this study, only two areas of psychological research will be reviewed. First, the question of creating attitude change through oral communication will be considered, and, second, the nature of the content of the oral communication will be discussed.

Numerous studies have been conducted to determine whether oral communication is effective in changing the attitudes of an audience (9, p. 413). One of the earliest significant studies in this area was directed by Franklin H. Knower in 1931-32. Knower used more than 800 subjects in his extensive study and concluded that oral communication can indeed "produce a statistically significant change of attitude in a group . . ." (7, p. 326).

Knower's study dealt with three areas which are pertinent to this study. He attempted to determine if factual appeals are more persuasive than emotional appeals, if attitude change is affected by the sex of the subjects, and if attitude change is affected by different speakers who use the same arguments.

Having divided his subjects into several different test groups for various types of presentations, Knower was able to compare the results of four types of speeches and the methods used by the speakers. He found that the factual speeches were equally as effective as the persuasive speeches;
that women's attitudes changed to a greater extent and in
greater numbers than men's attitudes, and that the male
speakers were more effective in changing attitudes of large
audiences than were the woman speakers (7, p. 343).

The effects of information on attitude formation and
attitude change are not completely understood, but most ex-
perts in the field agree that the subject's knowledge of the
concept under study is an important element in his attitude
development. Norman Anderson, a professor of psychology at
the University of California at San Diego, wrote,

Attitude change stands out from most areas
of experimental psychology in the nature of its
stimuli; in even the simplest investigations of
attitudes and opinions, the stimuli typically
carry information at a cognitive level not often
reached in other areas of research. Informa-
tional stimuli impinge on the person, in life or
in the laboratory, and he must integrate them
with one another as well as with his prior
opinions and attitudes. Social judgements are
typically based on a cumulation of various pieces
of information, sometimes of the most diverse
nature. Factual and hearsay evidence, rumors,
prestige associations, gesture and appearance,
may all bear on the final attitude. Information
integration is thus fundamental in attitude
change (2, p. 171).

There are other studies which support Anderson's idea.
In a 1969 study at the University of Massachusetts, each
subject was presented a "factual communication about one of
two countries. The information was obtained from encyclopedic
sources and was edited to remove evaluative content" (14,
p. 267). The subjects were tested to determine their atti-
tudes toward the people of the two countries described by
the factual communication and the people of two additional countries which were not described to any of the subjects. Results from the tests suggest that the factual information produced "positive affective responses toward the attitude subject" (14, p. 268).

An older study which has direct implications for this study was conducted in 1946 by a California education group. The purpose of the study was to determine educational implications and effects of a particular movie on school children. The population studied in the experiment included students in grades seven through twelve from three different school systems in California and Utah (13, p. 153).

The movie, *Tomorrow the World*, told the story "of a family of an American college professor who invites into its modern, democratically directed home and community the 12-year-old Nazi-trained son of a German scientist who 8 or 10 years before was killed as a traitor to the Third Reich." At the end of the movie the professor "points out the differences between the American way and the Nazi way . . ." (13, p. 151).

The subjects were tested on their knowledge and attitudes toward the Nazis both before and after seeing the movie. The results of the study indicated that after seeing the movie the students were somewhat more knowledgeable about the Nazis and their attitudes had changed somewhat, but neither change was considered significant (13, p. 163).
The implications of these studies are that attitudes are affected by increased knowledge about the attitude subject. Exactly how attitudes are affected is apparently dependent upon a number of variables, all of which are yet to be explained.

This short review is by no means a summary of all the data available in the area of attitude change. Nevertheless, it does provide a brief background and foundation for this study.

Hypotheses

To carry out the purposes of this study, the following hypotheses have been formulated:

I. The measured attitude mean of the exposure group and the measured attitude mean of the non-exposure group will not differ significantly at the beginning of the study.

II. The attitude change of the non-exposure group will not be significant.

III. The attitude change of the exposure group will be significantly more positive than the attitude change of the non-exposure group.


CHAPTER II

METHODS OF DATA COLLECTION

School Selection

The schools used in this study were arbitrarily selected and in no way represent a random selection. The three schools, Decatur High School (DHS), Grand Prairie High School (GPHS), and North Mesquite High School (NMHS), are all located in the Dallas-Fort Worth metropolitan area.

The Grand Prairie and North Mesquite schools were selected because of their similar senior class enrollment (400 and 461, respectively) and their similar geographic proximity to the city of Dallas. The researcher also felt there were other similarities in the social and economic makeup of the two suburban communities.

Decatur High School was selected to represent the rural element in the study because the town of Decatur, Texas, is located only 35 miles north of Fort Worth, has a population of 3,240, and largely depends upon farming and ranching for its local economy (10, p. 374).

The principal of each school was contacted to determine the possibility of using his school in the study. Each of the principals agreed to participate in the study provided no academic class time was involved. (The use of homeroom class periods eliminated the use of academic class time.)
Subjects

The subjects in this study were senior class students from Decatur High School (DHS), Grand Prairie High School (GPHS), and North Mesquite High School (NMHS). The DHS and GPHS students together constituted the "exposure group" representing the rural and suburban elements of the group, respectively. The NMHS seniors made up the "non-exposure group."

Both the "before" and "after" measurements were intended to test all senior class members at GPHS and DHS, but only a sample of the seniors at NMHS was tested.

The sample from NMHS was selected from a list of senior homeroom classes with approximately twenty-five students in each class. Classes were randomly selected from the list until the sample totaled approximately one-third of the class. The same homeroom classes were used at the end of the study.

The sample from NMHS is considered to be representative of the entire senior class at NMHS since the placement of students in the homeroom classes was a random process and no systematic elimination of any class was involved in the selection of the sample.

A total of 504 subjects were tested in the "before" measurement, but only 474 responses were usable for data analysis. The exposure group accounted for 363 of the usable answer sheets and the remaining 111 responses came
from the non-exposure group. A complete breakdown of both groups is given in Table I.

TABLE I
DISTRIBUTION OF RESPONDENTS AND USABLE RESPONSES AT EACH SCHOOL IN THE "BEFORE" MEASUREMENT

<table>
<thead>
<tr>
<th>School</th>
<th>Respondents</th>
<th>Usable Answer Sheets</th>
<th>Percentage of Responses Unusable</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPHS</td>
<td>336</td>
<td>318</td>
<td>5.04%</td>
</tr>
<tr>
<td>DHS</td>
<td>48</td>
<td>45</td>
<td>6.25%</td>
</tr>
<tr>
<td>NMHS</td>
<td>120</td>
<td>111</td>
<td>7.50%</td>
</tr>
<tr>
<td>Total</td>
<td>504</td>
<td>474</td>
<td>5.95%</td>
</tr>
</tbody>
</table>

Each respondent in the "before" measurement of attitude was identified by test location, sex, race, and college intentions (see Appendix B). A comparison of sex and race distribution at each of the test locations indicates the similar nature of the population makeup at each school (see Table II).

TABLE II
SEX AND RACE DISTRIBUTION OF THE SUBJECTS PARTICIPATING IN THE "BEFORE" MEASUREMENT AT EACH SCHOOL

<table>
<thead>
<tr>
<th>School</th>
<th>Females</th>
<th>Males</th>
<th>Minorities</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPHS</td>
<td>48%</td>
<td>52%</td>
<td>8.5%</td>
<td>91.5%</td>
</tr>
<tr>
<td>DHS</td>
<td>51</td>
<td>49</td>
<td>7</td>
<td>93</td>
</tr>
<tr>
<td>NMHS</td>
<td>48</td>
<td>52</td>
<td>6</td>
<td>94</td>
</tr>
</tbody>
</table>
Several weeks after the exposure group was presented the informational briefing about the Air Force ROTC program, both the exposure and non-exposure groups were retested. The total number of respondents in the "after" measurement declined sharply from the number of respondents in the "before" measurement. An explanation for this sharp decrease will be offered later.

Only 431 respondents participated in the "after" measurement, of which only 319 responses were usable in the data analysis. The exposure group accounted for 235 of the usable answer sheets, with the remaining 84 coming from the non-exposure group. A breakdown of the responses from the "after" measurement is shown in Table III.

**TABLE III**

DISTRIBUTION OF RESPONDENTS AND USABLE RESPONSES AT EACH SCHOOL IN THE "AFTER" MEASUREMENT

<table>
<thead>
<tr>
<th>Location</th>
<th>Respondents</th>
<th>Usable Answer Sheets</th>
<th>Percentage of Responses Unusable</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPHS</td>
<td>257</td>
<td>196</td>
<td>23.73%</td>
</tr>
<tr>
<td>DHS</td>
<td>56</td>
<td>39</td>
<td>30.35</td>
</tr>
<tr>
<td>NMHS</td>
<td>118</td>
<td>84</td>
<td>28.81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>431</strong></td>
<td><strong>319</strong></td>
<td><strong>25.98</strong></td>
</tr>
</tbody>
</table>

A comparison of Tables I and II indicates an increased percentage of unusable answer sheets in the "after" measurement at each test location. This increase was probably
caused by the students' inattention to detail, carelessness, and a general lack of concern--traits one might expect to find in high school seniors as graduation day approaches.

Each respondent in the "after" measurement was identified by test location, sex, race, college intentions, and whether or not the respondent completed the "before" measurement (see Appendix E). Those respondents who did not participate in the first testing were not included in the data analysis. The distribution by sex and race of the subjects in the "after" measurement is shown in Table IV.

<table>
<thead>
<tr>
<th>School</th>
<th>Females</th>
<th>Males</th>
<th>Minorities</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPHS</td>
<td>49%</td>
<td>51%</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>DHS</td>
<td>49</td>
<td>51</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>NMHS</td>
<td>50</td>
<td>50</td>
<td>7</td>
<td>93</td>
</tr>
</tbody>
</table>

Although there were seventy-nine fewer respondents from GPHS in the "after" measurement, the decreased number of subjects had little effect on the proportional composition of the group (compare Tables II and IV).

Exactly why there were fewer respondents from GPHS in the "after" measurement is not known for sure, but the most likely explanation is that the answer sheets from three homeroom classes were lost in the transfer from teacher to
principal to researcher. Since each class contained approximately twenty-five students, the loss of three classes would account for the missing answer sheets.

The loss of the answer sheets probably did not have any significant effect on the outcome of the study since the students in each of the homeroom classes at GPHS were randomly assigned to the classes, and there was no known systematic elimination involved in the lost responses. It is further assumed by the researcher that the 196 usable responses from GPHS adequately represent the senior class at the school.

Instrument

The instrument used in this study was a twenty-six-item Likert rating scale developed specifically for this study by following the guidelines established by Likert (7, p. 90) under the direction and guidance of Air Force Major Ronald Swanson, doctoral candidate in the psychology department at North Texas State University.

The Likert rating scale was selected for use in this study because of its ease of development, administration, and scoring; its compatibility with the study of attitude change; and its past history of high reliability (3, p. 157; 11, p. 468).

The attitude scale (Appendix D) consists of twenty-six statements (eleven positive, fifteen negative) about various
aspects of the Air Force ROTC training program. The respondents were asked to indicate their degree of agreement with each of the statements using a five-point rating scale.

The twenty-six items on the attitude scale used in the study were selected from thirty items (Appendix G) which were pretested on thirty-seven senior students at Lewisville High School in Lewisville, Texas, another Dallas suburb. The pretested items were selected from a twelve-item scale used in a similar study at Northwestern University (5) and from an original sixty-item pool of statements.

The students used in the pretest of the attitude scale were arbitrarily selected by the principal of the school and were not a statistically representative sample. However, the principal attempted to include students who would be representative of the entire senior class at Lewisville High School. The group included students from a physics class, a journalism class, and a study hall.

The answer sheets from the sample group of students were machine-graded and submitted to the North Texas State University Computer Center for item, test, and homogeneity analysis. The instrument was found to be highly reliable (.906) and only one item was determined to have an item-test correlation of less than .200, the minimum acceptable level recommended by Nunnally (9, p. 242).

The unacceptable item and two other items with low item-test correlations (.248 and .255) were not included on the
Another item was not included on the final scale even though it had a good item-test correlation (.648). It was not included because it had very poor response distribution, with 86 percent of the respondents answering "strongly disagree."

**Instrument Validity**

Attempting to show validity for an attitude measuring device is extremely difficult because of the lack of a "concrete notion of what the test is purported to represent," but since the entire results of this study are based on the data collected by the attitude scale, it was imperative that the instrument actually measure attitudes toward the Air Force ROTC training program (2, p. 97).

Since the attitude scale was developed specifically for this study, there were no data available on the validity of the instrument; therefore, steps were taken to collect data which would provide some degree of validation for the instrument. First, two psychology doctoral candidates at North Texas State University were asked to examine the twenty-six items on the final scale to determine if the instrument had "face" validity. They were asked to identify those items which they considered favorable to the Air Force ROTC program and those items which they considered unfavorable to the program. Both agreed on every item.
Two groups of students from North Texas State University were used in the second test of validity. One group consisted of eleven Air Force ROTC cadets, who were directed to answer the questionnaire as if their attitudes were very favorable toward the ROTC program, regardless of their actual attitudes. The second group consisted of sixteen journalism students, who were directed to answer the questionnaire as if their attitudes toward the ROTC program were very negative, disregarding their actual attitude toward the program.

The cadets who were directed to assume a favorable attitude had a mean score of 126.0, but the journalism students who were directed to assume an unfavorable attitude had a mean score of only 54.6. The maximum possible score on the scale is 130 and the minimum possible score is 26.

The extreme difference between the mean scores of the two groups demonstrates the excellent discriminatory ability of the instrument and implies that the instrument measures attitudes toward the Air Force ROTC program. Therefore, for the purposes of this study, the instrument is assumed to be both reliable and valid.

The Briefers

The briefers used in the study were selected from the senior Air Force ROTC cadets at North Texas State University. The senior class instructor, Major Byron J. Ihle, was asked to select the two cadets whom he considered to be the best qualified for making a presentation to a large audience.
The first cadet selected by Major Ihle was enrolled in the two-year ROTC program with a full college scholarship. The second cadet was enrolled in the four-year ROTC program without a scholarship, but he was receiving flying instructions through the Flight Instruction Program for pilot-qualified cadets.

Both cadets were typical of their fellow senior class cadets. They were knowledgeable and enthusiastic about the ROTC program and its advantages and opportunities, and both were well-spoken and poised before a large group. The two cadets were also active and involved in other college activities.

A few weeks after the study ended, both cadets were commissioned as second lieutenants in the Air Force and entered active duty.

The Briefing

The briefing presented in this study was designed to be informational as opposed to an overt effort toward persuasion or attitude change. The entire content of the briefing was based on factual data obtained from Air Force ROTC sources. Also, the briefers were reminded throughout the practice sessions that the purpose of the briefing was to inform and not to persuade.

The briefing was designed to include information covering the areas found to be of greatest interest to the subjects in the Froeschle study (4). Froeschle found that
young men eligible for enrollment in ROTC were interested in the areas of leadership training, pay while in college, variety of work, responsibility, usefulness of training, and service to others (4, p. 119). Each of these areas was discussed and the cadets gave personal examples to illustrate how the program fulfilled each area.

Even though the briefing was comprehensive, thoroughly planned and organized, and carefully rehearsed, there was no script prepared for the briefers. It was felt that if a prepared text were used the cadets would appear to be reading the material instead of speaking extemporaneously, which was the desired effect. Therefore, the briefers were given only an outline of the order of presentation and the basic material to be covered (see Appendix H).

The outline used by the briefers was developed by the cadets under the direction and guidance of the researcher, and it specifically included negative aspects of the program as well as the good points. The use of the two-sided argument was based on a 1970 study which found more attitude change in educated subjects when a two-sided presentation was used (1).

The briefing was developed during three practice sessions in which the basic data to be covered by each cadet was determined and a 35mm-slide presentation was organized. The use of the slides was suggested by a 1959 study (8) which found that pictures used in conjunction with verbal information have a significant effect on attitude formation and change.
In order to be precise and factual, each cadet briefed the information in the area in which he was most knowledgeable. For example, the cadet enrolled in the two-year commissioning program with the AFROTC scholarship, presented the information about those programs since he was involved in them.

During the actual briefings the cadets were dressed in civilian clothes rather than their Air Force uniforms. This procedure was used because it was believed that the subjects would tend to more readily accept the information presented from "college students" than from "ROTC cadets."

The subject of the briefing was also withheld from the students until the introduction of the speakers was completed, to prevent the students from formulating preconceived notions about the presentation and rejecting the data presented by the cadets. This idea is supported by a 1964 study which indicated that audiences forewarned of the subject of a presentation tend to have a greater rejection of the material presented than do audiences who are not forewarned (6, p. 549).

After the speakers and the topic were introduced by the principal of the school, each cadet presented his part of the briefing, alternating from one to the other as each subject was covered. The order of presentation remained the same in both briefings and the data covered were virtually the same, including the examples used by the cadets.
The researcher attended both briefings and was satisfied that the differences between the two briefings were inconsequential and would not significantly affect the outcome of the study. (This observation is supported by the similar attitude change that occurred in both elements within the exposure group.)

Procedures

The "Before" Measurement

The first administration of the attitude scale was conducted by the researcher on February 27, 1973, at the Decatur High School. Forty-eight subjects were tested, but only forty-five answer sheets were usable for analysis (Table I).

The first measurement at Grand Prairie High School was made on February 28, 1973. There were 336 students tested at that time, but only 318 responses were usable for this study (Table I). The administration of the measurement at GPHS was conducted by the homeroom teachers of the senior class.

To insure some degree of standardization in the different classrooms, each teacher was given an administration packet (Appendix A, B, C, D, F) which contained a letter of explanation, a sample identification number worksheet, an answer sheet with the identification number properly completed, and a copy of the questionnaire and instructions.
Both of the first two measurements were designed to survey the entire senior class of both schools; however, because of student absences, a few students were not included in the original measurement. Those students who missed the first measurement were excluded from the final measurement as well.

The non-exposure group was to have been tested at approximately the same time as the exposure group, but circumstances beyond the control of the researcher made this impossible; therefore, the group at NMHS was not tested until March 20, 1973. As in the other schools, the attitude scale was administered during the homeroom period and was conducted by the homeroom teachers.

In the first measurement of the non-exposure group, 120 subjects were tested, but only 111 answer sheets were usable in the data analysis (Table I). The 120 subjects tested represent approximately one-third of the NMHS senior class.

The first measurement of the schools in both groups surveyed a total of 504 senior students, but only 474 of the respondents' answer sheets were usable for data analysis (Table I). The reasons for rejecting some of the answer sheets were varied, but primarily they were considered unusable because the answer sheet was incomplete or the data in the identification number block was not complete.
Briefing Presentations

Two separate briefings were required in the study because the subjects in the exposure group were from different schools representing the suburban element and the rural element of the exposure group.

On March 5, 1973, the first of the two briefings was given to the rural element of the exposure group at DHS. The briefing was presented during a class assembly and was attended by fifty-three senior students and teachers. The class met in the school cafeteria, a large room with poor acoustics and minimal facilities for a presentation of the type used in the study.

The second briefing was presented on March 13, 1973, in the GPHS auditorium, which provided a better environment for the briefing than did the DHS cafeteria. Approximately 350 senior students attended the second presentation. There were no schedule conflicts on that date and it is assumed that all GPHS senior students attended the presentation; however, roll was not taken.

The two briefings presented to the rural and suburban subjects of the exposure group were identical in content and order of presentation. Each of the briefings lasted approximately twenty-five minutes with a ten-minute period at the conclusion for questions from the audience. The students at both schools utilized the full ten-minute question period, and at GPHS the students used an additional five minutes.
At both presentations several students remained to ask questions about their personal cases after the group had been dismissed.

The "After" Measurement

The first of the "after" measurements was administered on May 8, 1973, at GPHS, sixty-nine days after the initial measurement at the school and fifty-six days after the students were exposed to the briefing. The homeroom teachers again supervised the administration of the attitude scale to approximately 350 senior students. However, only 257 answer sheets were returned to the researcher following the testing (see page 21). Of the 257 answer sheets which were returned, only 196 were found to be usable for data analysis (Table III).

On May 10, 1973, seventy-two days after the initial attitude measurement and sixty-six days after the students were presented the briefing, the seniors at DHS were administered the attitude scale by the researcher. Fifty-six seniors participated, but only thirty-nine answer sheets were usable in the data analysis.

The non-exposure group at NMHS was administered the "after" measurement on May 25, 1973, sixty-six days after the initial measurement of the group. A total of 118 senior students participated in the testing, but only 84 answer sheets were usable in the data analysis.
The elapsed time between the "before" and "after" measurements was not exactly the same at each school, but the differences are considered insignificant since there was only a six-day difference between the longest and shortest elapsed time (seventy-two days at DHS and sixty-six days at NMHS).

Data Analysis

The answer sheets from all six administrations of the attitude scale were submitted to the North Texas State University Computer Center for data analysis. Identification data and answers from each respondent were entered on data cards which were analyzed by an IBM 360 Model 50 computer.

A program of item, test, and homogeneity analysis was run, and the results are discussed in Chapter III. A mean score, standard deviation, frequency distribution of scores, item-test correlations, and item response frequency distribution was computed for each group and subgroup in the study. Where differences between mean scores were indicated, levels of significance were determined by the calculation of $t$ tests, with a .05 level of significance set for all cases.
CHAPTER BIBLIOGRAPHY


CHAPTER III

RESULTS AND DISCUSSION

Analysis of the data indicates that the first two hypotheses are supported, but the third hypothesis was not supported. The first hypothesis stated that there would be no significant difference in the measured attitude of the exposure group as compared to the non-exposure group. This hypothesis is supported by the data in Table V.

**TABLE V**

TESTS OF SIGNIFICANCE BETWEEN THE MEAN SCORES OF THE SUBJECTS AT ALL THREE SCHOOLS PRIOR TO THE INFORMATIONAL BRIEFINGS

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Mean 1</th>
<th>Mean 2</th>
<th>t-value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure Non-exposure</td>
<td>87.204</td>
<td>86.423</td>
<td>.781</td>
<td>472</td>
<td>ns</td>
</tr>
<tr>
<td>NMHS*</td>
<td>86.423</td>
<td></td>
<td>.851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPHS**</td>
<td>87.274</td>
<td></td>
<td>.520</td>
<td>427</td>
<td>ns</td>
</tr>
<tr>
<td>DHS***</td>
<td>86.711</td>
<td></td>
<td>.113</td>
<td>154</td>
<td>ns</td>
</tr>
<tr>
<td>NMHS*</td>
<td>86.423</td>
<td></td>
<td>.288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPHS**</td>
<td>87.274</td>
<td></td>
<td>.243</td>
<td>361</td>
<td>ns</td>
</tr>
<tr>
<td>DHS***</td>
<td>86.711</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Non-exposure group.

**Suburban element of the exposure group.

***Rural element of the exposure group.

Table V shows the measured attitude mean for each school in the "before" measurement. The table reveals no
significant difference in attitude between the exposure group and the non-exposure group. The table also shows that no significant difference existed between any of the three schools used in the study.

None of the findings of this study would have been usable to any extent if the first hypothesis had not been supported. If all three schools had not had approximately the same measured attitude at the beginning of the study, comparisons of the measured attitudes at the end of the study would have been impossible.

In light of other findings which are to be discussed later, it should be noted that at the beginning of the study the least amount of difference in attitude existed between the subjects at Decatur High School (DHS), the rural element of the exposure group, and the subjects at North Mesquite High School (NMHS), the control group; whereas, the greatest amount of attitude difference existed between the subjects at Grand Prairie High School (GPHS), the suburban element in the exposure group, and the subjects at NMHS, the control group.

The second hypothesis predicted that the attitude change of the non-exposure group would not be significant. This hypothesis is supported by the data in Table VI. The table shows that there was no significant change in the mean of the non-exposure group's "after" measurement when compared to the group's "before" measurement. The table
also shows that no significant change occurred in any of the subgroups within the non-exposure group.

**TABLE VI**
TESTS OF SIGNIFICANCE BETWEEN THE MEAN SCORES OF THE "BEFORE" AND "AFTER" MEASUREMENTS OF THE NON-EXPOSURE GROUP

<table>
<thead>
<tr>
<th>Subjects</th>
<th>&quot;Before&quot;</th>
<th>&quot;After&quot;</th>
<th>$M_1-M_2$</th>
<th>t-value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (NMHS)</td>
<td>86.423</td>
<td>87.204</td>
<td>.601</td>
<td>.292</td>
<td>193</td>
<td>ns</td>
</tr>
<tr>
<td>Females</td>
<td>88.925</td>
<td>89.714</td>
<td>.789</td>
<td>.255</td>
<td>93</td>
<td>ns</td>
</tr>
<tr>
<td>Males</td>
<td>84.138</td>
<td>84.333</td>
<td>.195</td>
<td>.073</td>
<td>98</td>
<td>ns</td>
</tr>
<tr>
<td>Whites</td>
<td>86.333</td>
<td>86.795</td>
<td>.462</td>
<td>.214</td>
<td>181</td>
<td>ns</td>
</tr>
<tr>
<td>Minorities</td>
<td>88.000</td>
<td>90.000</td>
<td>2.000</td>
<td>.258</td>
<td>10</td>
<td>ns</td>
</tr>
<tr>
<td>Will Attend*</td>
<td>85.878</td>
<td>88.015</td>
<td>2.137</td>
<td>.845</td>
<td>137</td>
<td>ns</td>
</tr>
<tr>
<td>Will Not Attend**</td>
<td>88.867</td>
<td>85.714</td>
<td>3.153</td>
<td>.477</td>
<td>20</td>
<td>ns</td>
</tr>
</tbody>
</table>

*Subjects who planned to attend or probably would attend college.

**Subjects who did not plan to attend college or probably would not attend college.

The fact that no significant attitude change was created among the non-exposure group, the control element for the experiment, makes the other findings of the study more significant. That no change occurred among the subjects exposed only to Air Force mass communication advertising implies that any change found in the subjects of the exposure group was caused by the informational briefing.

Additional support for this finding is provided in Table VII, which compares the mean scores of those subjects who indicated they had been exposed to some form of mass
communication advertising about the Air Force or the Air Force ROTC program during the study period with the mean scores of those subjects who were not exposed to the advertising. The table also compares the mean of those subjects exposed to advertising to the mean of all subjects in the "after" measurement at each school. The table shows that Air Force advertising during the study period had little or no effect on the attitude change of the subjects.

TABLE VII
COMPARISONS OF MEAN SCORES OF SUBJECTS EXPOSED TO AIR FORCE ADVERTISING WITH SUBJECTS NOT EXPOSED TO ADVERTISING AND TO ALL SUBJECTS IN THE "AFTER" MEASUREMENT AT ALL THREE SCHOOLS

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Exposed ($M_1$)</th>
<th>Not Exposed ($M_2$)</th>
<th>$M_1 - M_2$</th>
<th>&quot;After&quot; ($M_3$)</th>
<th>$M_1 - M_3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMHS</td>
<td>86.288 (73)</td>
<td>91.909 (11)</td>
<td>5.621</td>
<td>87.024</td>
<td>0.736</td>
</tr>
<tr>
<td>GPHS</td>
<td>81.882 (152)</td>
<td>81.022 (44)</td>
<td>0.860</td>
<td>81.689</td>
<td>0.193</td>
</tr>
<tr>
<td>DHS</td>
<td>75.912 (34)</td>
<td>65.795 (5)</td>
<td>10.117</td>
<td>74.615</td>
<td>1.297</td>
</tr>
</tbody>
</table>

Even though subjects in both the exposure group and the non-exposure group who were exposed to Air Force advertising are identified in the table, the subjects in the non-exposure group (NMHS) provide the most significant data on the effects of the mass communication advertising. The fact that no significant change occurred in the group as a whole combined with the minimum difference between the subjects who were exposed to advertising and those subjects who were not
exposed strongly supports the finding that the advertising had little effect on the attitude change of the subjects.

This finding is further supported by the small difference in the attitude change of the subjects in the exposure group who were exposed to Air Force advertising in addition to the informational briefing when compared to the subjects who were not exposed to any advertising other than the briefing.

Additional support for the finding that Air Force advertising had little effect on the attitude change of the subjects is provided by Table VIII, which shows that more than 80 percent of the subjects were exposed to some form of advertising, and more than 87 percent of the non-exposure group came into contact with some form of advertising by the Air Force.

**TABLE VIII**

**SUBJECTS IN THE "AFTER" MEASUREMENTS WHO WERE EXPOSED TO MASS COMMUNICATION ADVERTISING DURING THE STUDY**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Subjects Tested</th>
<th>Subjects Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>319</td>
<td>259 (81%)</td>
</tr>
<tr>
<td>Exposure</td>
<td>235</td>
<td>186 (79%)</td>
</tr>
<tr>
<td>GPHS</td>
<td>196</td>
<td>152 (78%)</td>
</tr>
<tr>
<td>DHS</td>
<td>39</td>
<td>34 (87%)</td>
</tr>
<tr>
<td>Non-exposure (NMHS)</td>
<td>84</td>
<td>73 (87%)</td>
</tr>
</tbody>
</table>

Table VIII also supports the basic assumption presented in Chapter I that a majority of the subjects would be
exposed to some form of Air Force advertising during the study.

The third hypothesis dealt with the effects of the informational briefing on the subjects' attitude toward the Air Force ROTC program. The hypothesis predicted a positive attitude change among the subjects in the exposure group significantly greater than the change within the non-exposure group. However, even though the attitude change within the exposure group was significantly greater than the attitude change of the non-exposure group, the hypothesis was not supported because the change was in a negative direction. The data related to this hypothesis are presented in Table IX.

**TABLE IX**

TESTS OF SIGNIFICANCE BETWEEN THE MEAN SCORES OF THE "BEFORE" AND "AFTER" MEASUREMENTS OF THE EXPOSURE GROUP

<table>
<thead>
<tr>
<th>Subjects</th>
<th>&quot;Before&quot;</th>
<th>&quot;After&quot;</th>
<th>$M_{1} - M_{2}$</th>
<th>t-value</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (GPHS + DHS)</td>
<td>87.204</td>
<td>80.515</td>
<td>6.689</td>
<td>3.536</td>
<td>596</td>
<td>.01</td>
</tr>
<tr>
<td>Females</td>
<td>89.426</td>
<td>84.250</td>
<td>5.176</td>
<td>3.090</td>
<td>290</td>
<td>.01</td>
</tr>
<tr>
<td>Males</td>
<td>85.112</td>
<td>76.831</td>
<td>8.281</td>
<td>3.684</td>
<td>304</td>
<td>.01</td>
</tr>
<tr>
<td>Whites</td>
<td>87.432</td>
<td>81.171</td>
<td>6.261</td>
<td>4.122</td>
<td>541</td>
<td>.01</td>
</tr>
<tr>
<td>Minorities</td>
<td>84.667</td>
<td>74.708</td>
<td>9.959</td>
<td>2.408</td>
<td>52</td>
<td>.05</td>
</tr>
<tr>
<td>Will Attend*</td>
<td>86.124</td>
<td>79.082</td>
<td>7.042</td>
<td>3.945</td>
<td>397</td>
<td>.01</td>
</tr>
<tr>
<td>Will Not Attend*</td>
<td>90.567</td>
<td>85.100</td>
<td>5.467</td>
<td>1.724</td>
<td>115</td>
<td>ns</td>
</tr>
</tbody>
</table>

*See Table VI.
The findings in this area of the study tend to support the findings of other studies (2, 3, 4, 5) which have shown that increased knowledge about an attitude subject will tend to create an attitude change about the attitude subject. In the other studies, however, the attitude change has been in a more positive direction, while the subjects in this study indicated a more negative change of attitude after learning more about the Air Force ROTC program.

Table IX compares the "before" and "after" mean scores of the exposure group, and also shows the test for significance of change of each subgroup within the exposure group. The data show that the negative change within the exposure group was not caused by any particular subgroup, but rather was a result of a universal decline throughout the subgroups. It should be noted, however, that the negative change among those students who did not plan to attend college was not statistically significant.

The fact that no attitude change occurred among the subjects in the non-exposure group, the control element in the study, and that significant changes of attitude were detected among the subjects exposed to the informational briefing implies that the briefing created significant negative attitude change in the subjects of the exposure group. This finding is further supported by the data in Table VII which show only small difference between the mean scores of those subjects in the exposure group who were also exposed to Air
Force advertising and those subjects in the group who were not exposed to additional advertising.

Examination of the data reveals other findings of interest which are not directly related to the hypotheses of the study. The influence of the various demographic factors on attitude change is presented in Table IX. The table shows the change of each of the tested subgroups and the level of significance of each change.

Table IX shows that within the exposure group the females had less negative change than did the males in the group. This finding was true in both the rural and suburban elements of the exposure group. However, Table X shows that the rural females had a greater negative change than did the suburban males. Table X also shows that the minimum change in any of the subgroups in the exposure group was among the suburban females.

The relationship of race to attitude change in this study is also shown in Table IX. The table shows that within the exposure group, the minority students' mean score change was more than 50 percent greater than the mean score change of the Caucasian students.

Whether a subject planned to attend college or not seemed to have little effect on his attitude change. Even though the attitude change of those students who did not plan to attend college was not statistically significant, the change among those students was in the same negative
direction as those students who did plan to attend college, and very closely approached the .05 level of significance.

TABLE X

COMPARISONS OF "BEFORE" AND "AFTER" MEANS AND MEAN DIFFERENCES OF THE RURAL AND SUBURBAN ELEMENTS OF THE EXPOSURE GROUP

<table>
<thead>
<tr>
<th>Subjects</th>
<th>&quot;Before&quot;</th>
<th>&quot;After&quot;</th>
<th>$M_1-M_2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPHS*</td>
<td>87.274</td>
<td>81.689</td>
<td>5.585</td>
</tr>
<tr>
<td>DHS**</td>
<td>86.711</td>
<td>74.615</td>
<td>12.096</td>
</tr>
<tr>
<td>Females*</td>
<td>90.065</td>
<td>86.423</td>
<td>3.642</td>
</tr>
<tr>
<td>Females**</td>
<td>85.174</td>
<td>73.158</td>
<td>12.016</td>
</tr>
<tr>
<td>Males*</td>
<td>84.685</td>
<td>77.050</td>
<td>7.635</td>
</tr>
<tr>
<td>Males**</td>
<td>88.318</td>
<td>76.000</td>
<td>12.318</td>
</tr>
<tr>
<td>Whites*</td>
<td>87.457</td>
<td>82.182</td>
<td>5.275</td>
</tr>
<tr>
<td>Whites**</td>
<td>87.262</td>
<td>76.114</td>
<td>11.148</td>
</tr>
<tr>
<td>Minorities*</td>
<td>85.296</td>
<td>77.350</td>
<td>7.946***</td>
</tr>
<tr>
<td>Minorities**</td>
<td>79.000</td>
<td>61.500</td>
<td>17.500***</td>
</tr>
<tr>
<td>Will Attend*</td>
<td>86.104</td>
<td>80.583</td>
<td>5.521</td>
</tr>
<tr>
<td>Will Attend**</td>
<td>86.276</td>
<td>71.462</td>
<td>14.814</td>
</tr>
<tr>
<td>Will Not Attend*</td>
<td>90.466</td>
<td>85.415</td>
<td>5.051***</td>
</tr>
<tr>
<td>Will Not Attend**</td>
<td>91.222</td>
<td>83.667</td>
<td>7.555***</td>
</tr>
</tbody>
</table>

*Suburban students.

**Rural students.

***Not statistically significant changes.

A comparison of the rural students to the suburban students revealed that more negative change occurred in the rural subjects than occurred in the suburban subjects.

Table X compares the rural and suburban elements in both the "before" and the "after" measurements.
Although the rural community has traditionally shown greater patriotism and support for the military (1), the findings in this study indicated more negative feelings toward the Air Force ROTC program among the rural students both before and after the informational briefing about the program. As shown by Table X, the difference between the rural subjects and the suburban subjects at the beginning of the study was insignificant, but after the briefing the rural students showed an obviously greater negative change in every subgroup than did suburban students.

Although the greatest change occurred among the rural minorities, the attitude change of the group was not statistically significant. Among the subgroups which had significant changes, the rural students who indicated they planned to attend college had the greatest change.

No item-analysis is offered in this chapter, because there were no significant findings among the item scores; however, a table of item-means from both the "before" and "after" measurements is presented in Appendix I.

The data collected by this study provides a basis for several conclusions about the effects of increased knowledge about an attitude subject and the effects of mass communication advertising on attitude change. Those conclusions are presented in Chapter IV.


CHAPTER IV

SUMMARY AND CONCLUSIONS

The study tested 504 subjects from three high school senior classes to measure their attitudes toward the Air Force ROTC program. Of this total, only 474 answer sheets were usable for data analysis.

After the "before" attitude measurement, subjects in the exposure group were presented an informational briefing about the Air Force ROTC program. The briefing, presented by two ROTC cadets, lasted approximately thirty minutes and covered numerous areas of the ROTC program. The non-exposure group was exposed only to Air Force mass communication advertising during the two-month study period.

Approximately two months after the first measurement, 431 subjects were tested to determine if any change of attitude had occurred among the subjects in the exposure group and the non-exposure group. In the "after" measurement, only 319 answer sheets were usable for data analysis.

Analysis of the data showed that when the study began no significant difference of attitude existed between the suburban subjects and the rural subjects. Also, there was no significant difference between the attitudes of the two groups of suburban subjects in the study.
A comparison of the "before" and "after" attitudes of the subjects in the non-exposure group who were exposed only to Air Force mass communication advertising showed no significant attitude change had occurred among those subjects. On the other hand, the attitude of the exposure group, those subjects who were exposed to the informational briefing, was significantly more negative in the "after" measurement than it was at the beginning of the study. This negative change occurred in all subgroups of the exposure group.

Conclusions

The data collected by this study produced a number of findings which provide the basis for a number of conclusions. Considering the stated purposes and hypotheses of this study, the following conclusions have been reached.

1. Because of a general lack of knowledge about the Air Force ROTC training program, both rural and suburban students have approximately the same neutral or "no opinion" attitude toward the program.

2. The Air Force mass communication advertising conducted during the study period apparently had little or no effect upon the subjects' attitude toward the Air Force ROTC program.

3. When high school students are informed about both the positive and negative aspects of the Air Force ROTC program, the students tend to develop negative attitudes toward the program.
Since the basic aim of this study was to contribute to the general body of knowledge about the effects of increased knowledge on attitude change, it seems the most important finding of the study lies in the attitude change among the subjects exposed to the informational briefing. Although the attitude change of the subjects was not in a positive direction as predicted in the hypothesis, the fact that attitude change occurred supports the conclusion of other researchers that increased knowledge does, in fact, create attitude change.

Since other studies have shown that attitude change resulting from increased knowledge has a tendency to occur in a more positive direction, the question of why the attitude change in this study occurred in a negative direction must be considered.

A number of possible explanations to this question exist. Possibly there was something about the presentation of the briefing which was disliked by the subjects, perhaps the briefers themselves, their delivery, or the format of the briefing. It is also possible that there were some uncontrolled factors which affected only those students in the exposure group. Or possibly, the mere fact that the students of the exposure group were involved in one more session than the non-exposure group could have irritated the students and thus caused a negative attitude to develop toward the ROTC program as a corollary to their feelings about the study.
However, the most likely explanation of the negative attitude change among the subjects of the exposure group is that after the informational briefing the subjects felt the negative aspects of the Air Force ROTC program outweighed the positive aspects. This explanation is based on the assumption that from the viewpoint of a high school senior most of the advantages of the ROTC program, i.e., a good salary after college, medical benefits, job training, early retirement, etc., are all long-range aspects and only remote possibilities; but, the disadvantages of the program, i.e., military haircuts during college, wearing a military uniform on campus, attending drill formations, etc., are more immediate realities to be faced by the prospective cadets.

This last explanation raises the question of what effect the informational briefing might have had if only positive aspects of the ROTC program had been presented. This study made no attempt to determine the effects of different types of information about the attitude subject, but future research should consider this question. However, for the purposes of this study, if the negative aspects of the program had been eliminated, the briefing would have taken on the characteristics of a propaganda or persuasive appeal as opposed to an informative presentation.

The attitude change of the exposure group would have been less clear-cut had there been any change of attitude among the non-exposure group, but the data indicate that
those subjects exposed only to Air Force mass communication advertising had no significant change of attitude. Even though more than 87 percent of the subjects in the non-exposure group indicated they had been exposed to some form of Air Force advertising during the study period, the attitudes of these subjects were not changed by the advertising.

It is possible that over a longer period of time than the two-month study period attitudes might be affected more significantly by mass communication advertising; however, the data collected at the beginning of the study do not support this as a possibility. The first attitude measurement found that both the suburban subjects and the rural subjects had mean scores close to the midpoint on the attitude scale, reflecting a "no-opinion" attitude toward the ROTC program. This neutral attitude existed in spite of the fact that the Air Force has been advertising its ROTC program for several years.

This neutral attitude toward the ROTC program at the beginning of the study suggests that the subjects were generally uninformed about the ROTC program. This conclusion is supported by two other studies (1, 2) which found a considerable lack of knowledge about the ROTC program among high school seniors. Therefore, it appears that Air Force mass communication advertising has been an ineffective means of creating favorable attitudes toward the Air Force ROTC program.
The fact that more than 80 percent of all the subjects in the study were exposed to Air Force mass communication advertising but that no significant attitude change was created by the advertising suggests a need to evaluate the overall effectiveness of mass communication advertising in the area of attitude formation and change.

The data collected by the study also suggest that there exists some relationship between the respondent and the attitude subject itself which has some influence on the direction of the attitude change. That is to say, after a person becomes more knowledgeable about an attitude subject, his attitude change toward a neuter subject might be entirely different from his attitude change toward a subject more directly related to the person. Obviously, there is a need for additional research to determine the actual influence of the attitude subject on attitude change toward that subject.

Basically, it can be stated that the major finding of this study is that the data indicate that increased knowledge of an attitude subject tends to create a change of attitude toward the subject. However, this study has shown that the attitude change is not necessarily more positive as a result of the increased knowledge.
CHAPTER BIBLIOGRAPHY


Appendix A

To: Administrator of attached Air Force ROTC Attitude Survey

You should have a sufficient number of student identification work sheets, computer answer sheets, and attitude surveys to issue one of each to every student in your class.

Before assigning the attitude survey—have the students complete the student identification worksheet (see page 1 of your sample), and transfer the eight numbers to the IDENTIFICATION NUMBER block in the upper right corner of the answer sheet (see page 2 of your sample).

NOTE: The student need not fill in any of the blanks across the top of the answer sheet.

After assigning the attitude survey—read the instructions aloud, emphasizing the six problem areas listed at the bottom.

Remind the students the attitude survey is a series of statements, not questions, and is designed to determine their attitude (positive, negative, or indifferent) toward the Air Force ROTC program. It is not a test of their knowledge of the program.

If a student should ask (and at least one probably will) how he can answer an item about which he knows nothing—point out that answer three (3) indicates the student neither agrees nor disagrees with the statement.

It is important to the results of this study that the administrator not influence the students in their response by answering questions about the Air Force ROTC program.

Thank you for your assistance.

Robert Andrews
Graduate Student
North Texas State University
Appendix B

IDENTIFICATION NUMBER Worksheet

☐ Test Location

☐ Sex:
   1. female
   2. male

☐ Race:
   1. caucasian
   2. black
   3. mexican-american
   4. other

☐ College Intentions:
   1. will attend
   2. probably will attend
   3. undecided
   4. probably will NOT attend
   5. will NOT attend

In each of the categories above select the appropriate information as it applies to you -- put the corresponding number in the square beside the category heading (Test Location number will be announced by the Test Administrator.)

After filling-in the four (4) numbers, transfer the information to the computer answer sheet in the IDENTIFICATION NUMBER block in the upper right corner. Darken the scoring block corresponding to the number in the square.
Appendix C.

Air Force Reserve Officer Training Corps (ROTC)

On the following pages are 26 statements about the Air Force ROTC training program.

Please read each statement very carefully—think about what it says—then decide if you agree or disagree.

Using the scale below, indicate the degree of your opinion of the view expressed by each statement. Mark your answers on the separate answer sheet.

RATING SCALE
1---STRONGLY DISAGREE
2---somewhat disagree
3---neither agree nor disagree
4---somewhat agree
5---STRONGLY AGREE

EXAMPLE:

statement          answer sheet
99. We need cleaner air.   99. 1  2  3  4  5

The answer in this example would indicate you STRONGLY AGREE with the statement.

BEFORE YOU BEGIN—-Carefully read the following:

1. Mark your answer sheet with PENCIL ONLY!
2. Notice the numerical sequence on the answer sheet goes from left to right—NOT from top to bottom.
3. If you wish to change any answer, be sure to erase the undesired answer completely.
4. Answer all 26 items—do not leave any items blank.
5. Do not mark on the answer sheet except to fill in marking blocks.
6. Do not mark more than one answer for each question.
RATING SCALE
1---STRONGLY DISAGREE
2---somewhat disagree
3---neither agree nor disagree
4---somewhat agree
5---STRONGLY AGREE

1. Air Force ROTC provides an effective program for training Air Force officers.
2. Air Force ROTC provides the college freshman an opportunity to meet new people with common interest.
3. Air Force ROTC training is useful only to people interested in joining the military.
4. People who participate in Air Force ROTC do so because they like war.
5. Air Force ROTC is a step toward becoming a leader of men.
6. I see little or no value in requiring college students to take courses in military training (such as AFROTC.)
7. Requiring a student to wear an Air Force uniform on a college campus is an unnecessary harassment of the student.
8. Air Force ROTC is more of a technical training program than an academic learning situation.
9. The leadership experience gained in the Air Force ROTC program is well worth the time and effort required of the student.
10. The money required to support the Air Force ROTC program is money well spent.
11. Air Force ROTC discourages free and independent thinking.
12. Air Force ROTC training limits a student's participation in other college activities.
13. Overall, Air Force ROTC has more advantages than disadvantages.
14. Air Force ROTC should be offered at all major colleges and universities.
RATING SCALE

1---STRONGLY DISAGREE
2---somewhat disagree
3---neither agree nor disagree
4---somewhat agree
5---STRONGLY AGREE

15. Air Force ROTC limitations on hair styles is a harassment of the ROTC students.

16. Student demonstrations directed at ROTC facilities during past anti-war riots were justified.

17. Air Force ROTC's academic approach to military matters is to be admired.

18. The major portion of Air Force ROTC training is useful and relevant.

19. Air Force ROTC is a valuable experience for most who join.

20. The Air Force ROTC program does not provide quality training to its students.

21. Scholarships for Air Force ROTC students should be discontinued as they cost the taxpayer too much money for what the student gives in return.

22. As a result of their training, Air Force ROTC students become "war-mongers."

23. Air Force ROTC training helps students to become better citizens.


25. Air Force ROTC is a waste of college students' time.

26. I would not enroll in Air Force ROTC even if I knew more about the requirements and benefits of it.

Please check your answer sheet to be sure all erasures are complete and all 26 items are answered.

Thank you for your co-operation.
IDENTIFICATION NUMBER Worksheet

APPENDIX E

In each of the categories below select the appropriate information as it applies to you—put the corresponding number in the square beside the category heading.

After filling-in the eight (8) numbers, transfer the numbers to the computer answer sheet in the IDENTIFICATION NUMBER block in the upper right corner. Darken the scoring block corresponding to each of the numbers in the squares.

☐ Test Location:

☐ Sex:
  1. female  2. male

☐ Race:
  1. caucasian  2. black  3. mexican-american  4. other

☐ College Intentions:
  1. will attend
  2. probably will attend
  3. undecided
  4. probably will NOT attend
  5. will NOT attend

☐ This survey was first conducted approximately two months ago—Did you answer the questionnaire at that time?
  1. YES  2. NO

☐ During the past two months have you seen, read, or heard any advertisements about the Air Force or the Air Force ROTC program?
  1. YES  2. NO

☐ If the answer to the question above was YES—What type of advertisement did you see or hear most often?
  1. television  3. magazine  4. newspaper  5. other  6. none

☐ Are you presently enrolled in a high school ROTC program or the Civil Air Patrol?
  1. YES  2. NO
### Appendix F

**ECTIONS:** Read each question and its numbered answers. When you have decided which answer is correct, blacken the corresponding line on this sheet with a No. 2 pencil. Make your mark as long as a pair of lines, and completely fill the area between the pair of lines. If you change your mind, erase your first mark COMPLETELY. Make stray marks; they may count against you.

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Appendix G

Air Force Reserve Officer Training Corps (ROTC)

Listed below are 30 statements about the Air Force ROTC training program which you will be asked to indicate whether you agree or disagree with them.

On the separate answer sheet please indicate the degree of your agreement with the point of view expressed by each of the statements using the scale below:

1-- strongly disagree
2-- somewhat disagree
3-- neither agree or disagree
4-- somewhat agree
5-- strongly agree

EXAMPLE:

<table>
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<th>statement</th>
<th>answer sheet</th>
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<tr>
<td>100. Sex is fun.</td>
<td>100. 5/5/5/5/5</td>
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This answer would indicate you strongly agree with the statement "Sex is fun."

1. Air Force ROTC provides an effective program for training Air Force officers.

2. Air Force ROTC provides the college freshman an opportunity to meet new people with common interest.

3. Air Force ROTC training is useful only to people interested in joining the military.

4. People who participate in Air Force ROTC do so because they like war.

5. Air Force ROTC is a step toward becoming a leader of men.

6. I see little or no value in requiring college students to take courses in military training (such as AFROTC.)

7. Requiring a student to wear an Air Force uniform on a college campus is an unnecessary harassment of the student.

8. Air Force ROTC is more of a technical training program than an academic learning situation.

9. The leadership experience gained in the Air Force ROTC program is well worth the time and effort required of the student.
10. The money required to support the Air Force ROTC program is money well spent.

11. Air Force ROTC discourages free and independent thinking.

12. People who take Air Force ROTC are "weirdos."

13. Air Force ROTC training limits a student's participation in other college activities.

14. Overall, Air Force ROTC has more advantages than disadvantages.

15. Air Force ROTC should be offered at all major colleges and universities.

16. Air Force ROTC students are entitled to the money paid to them by the Air Force while they are in training.

17. Air Force ROTC limitations on hair styles is a harassment of the ROTC students.

18. Student demonstrations directed at ROTC facilities during past anti-war riots were justified.

19. Air Force ROTC's academic approach to military matters is to be admired.

20. The major portion of Air Force ROTC training is useful and relevant.

21. Air Force ROTC is a valuable experience for most who join.

22. The Air Force ROTC program does not provide quality training to its students.

23. Scholarships for Air Force ROTC students should be discontinued as they cost the taxpayer too much money for what the student gives in return.

24. As a result of their training, Air Force ROTC students become "war mongers."

25. Air Force ROTC has a right to operate freely at universities.

26. Air Force ROTC training helps students to become better citizens.

27. Air Force ROTC really does not fit in on a college campus.

28. Air Force ROTC is a waste of college students' time.

29. I would not enroll in Air Force ROTC even if I knew more about the requirements and benefits of it.

30. I plan to enroll in an Air Force ROTC program when I enter college.
APPENDIX H

BRIEFING OUTLINE

INTRODUCTION
- tell a joke or story
- reason for the briefing
- present the advantages, disadvantages of ROTC
- "tell it like it is"
- overview
  - who is eligible
  - programs available
  - program requirements
  - scholarship program
  - campus activities
  - benefits after graduation

WHO IS ELIGIBLE
- both males and females--Air Force first
- anyone enrolled at a college with the program
  - must have at least 4 long semester left at school
- to enroll in advanced program must complete AF OOT

PROGRAMS AVAILABLE
- 4 year program with or without scholarship
  - requires 4 week summer camp
- 2 year program with or without scholarship
  - requires 6 week summer camp

PROGRAM REQUIREMENTS
- enroll during registration the same as for any class
- attend class twice a week for one hour
- attend leadership lab once each week for one hour
  - in the past this was called "Drill"
- wear the AF uniform once each week and to leadership lab
- hair must be cut to meet Air Force standards in the advanced program--may be worn long during basic course
- attend a summer camp program--4 and 6 week camps
  - required for only those cadets entering advanced program
- discuss summer camp activities
  - briefings about the Air Force
  - physical training
  - leadership training
  - survival training
  - orientation flight in a jet
SCHOLARSHIP PROGRAM

- who is eligible
- 4, 3, and 2 year programs
- what is paid for
- other benefits of the program

CAMPUS ACTIVITIES

- classroom projects
- projects outside the classroom
  - community projects such as blood drive, heart fund
  - Corps projects such as homecoming float, military ball
  - provides an opportunity to display ones ability to accept responsibility
- Corps related organizations and activities
  - Arnold Air Society
  - Angel Flight
  - drill team
  - band
  - all attend Mardi Gras each year

BENEFITS AFTER GRADUATION

- receive commission as a 2nd Lt.
- excellent starting salary (pay scale shown on slide)
- free medical care
- BX and Commissary (explain what these are)
- free travel on military aircraft (space A)
- 30 days paid vacation each year
- a job with responsibility
- valuable management experience for those who get out
- early retirement for those who stay in

CONCLUSION

- repeat reasons for the briefing
- ask for questions from the students
- after question period, encourage the students who are interested in more information to contact their high school counselor
# APPENDIX I

## MEAN SCORES FOR EACH ITEM FROM "BEFORE" AND "AFTER" TESTS AT ALL THREE SCHOOLS

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