

**An Experimental Study of the
Effects Of Army Recruitment**

**Television Advertising
on High School Seniors**

By

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1. INTRODUCTION

Background

In 1973, the United States abandoned the policy of involuntary conscription as a means of procuring personnel to serve in the Armed Forces. Today, the Armed Forces are made up exclusively of volunteers. From its inception, critics of the "all volunteer force" have questioned the efficiency, effectiveness, and fairness of the concept of volunteers staffing the country's military (Binkin, 8-10).

Throughout the late 1970s and early 1980s, the Armed Forces had difficulty meeting personnel requirements. Military pay raises did not keep pace with civilian sector wages, educational benefits for service members were reduced, and training, recruiting and advertising budgets were small in relation to the military's needs. As a result of these factors, military recruitment and military preparedness suffered (Binkin, 8-10).

In 1980, Ronald Reagan was elected president after running on a campaign promising a re-strengthening of the country's military forces. Soon after taking office, President Reagan began taking actions to meet his campaign promise. He championed substantial pay increases for military members and increased military budgets for a massive build up. Reagan's military defense strategy became known through his motto of "Peace through Strength."

An economic recession, along with higher military pay and improved quality of life conditions in the services, led to growth in the all-volunteer forces. Military ranks grew as the number of jobs in the civilian sector diminished (Binkin, 42-50) and as military pay became more competitive.

More resources were allocated for military recruitment programs, and the American public seemed to respond to Reagan's message promoting military service as a noble form of national service and patriotism (Binkin, 204).

The Armed Forces have continued to operate well under the volunteer system, but increasingly, the military branches (Army, Air Force, Navy, Marines and Coast Guard) are competing among themselves, and with the National Guard and Reserves, for qualified, willing applicants. They also compete with the nation's colleges and universities.

The Army Advertising and Sales Program

The U.S. Army believes well-conceived and carefully executed advertising and sales promotions are essential to successful recruiting. The goals of the Army's Advertising and Sales Program (A&SP) are: 1) to contact general audiences at a reasonable cost per contact; 2) to motivate individuals to establish a personal contact with an Army recruiter; 3) to gain the assistance and support of parents, educators, and other influences; and 4) to provide printed, voice, and film aids to help recruiters graphically illustrate their presentations (NGB Pam 601-200, 7-1).

The Advertising and Sales Program has five major elements or services (NGB Pam 601-200, 7-2).

- a. Advertising: Using mass communications media to convey recruiting messages.
- b. Promotions: Coordination with the mass communications media to obtain public support.
- c. Recruiting support: Advertising response referrals (leads); school entry materials and programs; assistance with media contacts and means to contact groups of students, other prospects, and current members.
- d. Educator liaison: Contact with educational personnel to provide information.
- e. Sales presentation/promotional items: Materials for recruiters to help explain and reinforce the Army's message. These materials, known as recruiting promotional items (RPI), include brochures, pamphlets, folders, catalogs, and films.

The Army has established four standards that all advertising must adhere to, regardless of the media used (NGB Pam 601-200, 7-4). First, the advertisement must be honest. The pictures and words must represent the Army "the way it is." Second, the advertisement must be accurate. The materials, both copy and pictures, must be technically correct. Uniforms and the appearance of individuals pictured must conform with current standards and authorized uniform composition policies. Weapons and equipment used and displayed must be shown in a manner that conforms with regulations, tactics, techniques, approved practices, doctrine and policies, with an emphasis on safety. Third, the message must be compelling. Fourth, Army advertising must show a good balance of sexes and races (NGB Pam 601-200, 7-4).

The goal of the Army's recruitment advertising is to obtain maximum effect for minimum investment (NGB Pam 601-200, 7-5). In order to achieve this goal the recruiter must consider the following:

- a. Target Audiences: Advertisement is targeted at high school graduates and high school seniors between the ages of 17 to 21. It must also leave a favorable impression on potential "influences" such as parents, peers, teachers, counselors, etc.. (NGB Pam 601-200, 7-5, a.)
- b. Contact: Reach, frequency, and unit of time are the measures; the value of each is unknown (NGB Pam 601-200, 7-5, a.).
- c. Penetration: Audience reaction is the penetration measure. To penetrate, an advertisement must contain an attractive and compelling message (NGB Pam 601-200, 7-5, a.).
- d. Timing: Advertising and promotional efforts must be carefully timed in accordance with each medium's maximum effectiveness. For each medium, the recruiter must consider when and where to run advertisements (NGB Pam 601-200, 7-5, d.).
- e. Response: Telephone and mail inquiries are the desired results of advertising. The level of response is the measure used to judge advertising effectiveness

(NGB Pam 601-200, 7-5, e.).

Significance of Study

For Army recruiters in the Appalachian region to effectively reach the desired target audience, they must know how Army recruiting advertisements affect students of different academic abilities, social status and ethnicity. Likewise, knowing the types of television programs preferred by various groups would enhance recruiters' abilities to effectively target advertising efforts.

Problem Statement

In order for Army recruiters in the Appalachian region to effectively reach their target audience through television advertising, they must know which segment within the overall stated target audience of high school seniors between the ages of 17 to 21 are most likely to be influenced by Army recruitment advertising. Recruiters must also determine the type of programming preferred by the primary target segment to enable recruiting messages to be placed in programming where it is likely to have the most impact and achieve maximum frequency of exposure among the most receptive audience.

Scope

This study is focused on high school seniors between the ages of 17 to 21 in Huntington, West Virginia. The results of this experiment will help give more definition to the target group. The findings of this study are expected to help recruiters define the primary segment of their target audience and determine the type of television programming to target for advertising campaigns.

Hypotheses:

Hypothesis One: Army recruitment advertising has a positive short-term effect on high school seniors ages of 17 to 21.

Hypothesis Two: Army recruitment advertising is most effective on high school seniors between ages 17 to 21 who report they are average students.

Hypothesis Three: Army recruitment advertising is most effective on individuals within the target group who have similar television viewing preferences.

Hypothesis Four: Army recruitment advertising is most effective on high school seniors that are of similar lower economic backgrounds.

Hypothesis Five: Individuals within the target group who do not have clearly defined post-graduation plans (college or employment) will be more readily influenced by Army recruitment advertising.

Data-Gathering Procedures

A sample of sixty-six high school seniors from Huntington, West Virginia, ages 17 to 21, participated in a field experiment designed to establish if academic ability, post graduation plans, television viewing preferences and socio-economic status determined the amount of influence televised Army recruitment advertisements had on prospective recruits.

Seniors who were available to participate in this study were randomly assigned to either a control group or a treatment group. Students in both groups were administered a pre-test (See Appendix A) to determine demographic information and how receptive they were to recruitment advertising. Both groups were exposed to a short television program (See Appendix B). The control group watched a program that included a Ford truck advertisement and an MCI Telephone advertisement. The treatment group watched an identical program with the same Ford commercial, but in place of the MCI advertisement an Army recruitment advertisement was shown. Both groups were administered a post-

test (See Appendix A). The objective of the post test was to determine if students in the treatment group registered a shift in their views of the Army after watching the recruitment advertisement.

The Modeling Theory

The modeling process described by DeFleur and Ball-Rokeach may help describe how Army recruiting advertisements on television appear to have a greater influence on individuals who have not attended college or do not plan to attend college.

Modeling Process

According to DeFleur and Ball-Rokeach (216-217), six steps are involved in the modeling theory process:

1. An individual member of an audience observes or reads about a person (model) engaging in a particular pattern of action in media content.
2. The observer identifies with the model; that is, believes that he or she is like the model, wants to be like the model, or sees the model as attractive and worthy of imitation.
3. The observer realizes or unconsciously reaches the conclusion that the observed or described behavior will be functional. That is, the person comes to believe that the behavior will bring about some desired result if it is imitated in a particular situation.
4. The individual remembers the actions of the model when confronted with the relevant circumstances (stimulus situation) and reproduces the behavior as a means of responding to that situation.
5. Performing the reproduced activity in the relevant stimulus situation brings the individual some relief, reward, or satisfaction, thereby causing the link between those stimuli and the modeling response to be reinforced.

6. Positive reinforcement increases the probability that the individual will reproduce the activity repeatedly as a means of responding to similar situations.

The modeling theory can be readily applied to individuals who have not decided to attend college and to those who are unable to attend. A high school senior who watches a recruiting ad may believe that he or she can improve his or her situation or earn money to attend college by joining the Army. Others may view the Army as a good way to gain experience for the future. In any event, the advertisements attempt to portray the Army as something positive to model. In all the advertisements the Army portrays the subject (model) receiving rewards for joining the Army (money for college, work experience, respect, maturity, accomplishment, etc.).

2. LITERATURE REVIEW

Demographics Play a Role in How Much Influence Army Recruitment Ads Have on the Target Group.

A study of two different Army recruitment advertisements conducted by U. S. Army Major Gary Lee Keck and Barbara Mueller found that intended as well as unintended messages were received by students who participated in their study. Another conclusion determined from this study was that educational level, social status, and race played a part in how much influence the advertisement had over the viewer.

Results from this study indicated 84 % of those without any college experience stated the advertisements gave a true representation of what life in the Army was like, 27 % of those with some college stated the advertisement gave a true representation, but only 9 % of college graduates said the advertisements accurately portrayed life in the Army (Keck and Mueller, table 5).

The results of the study indicated race was another significant factor in how the advertisements were received. Seventy one percent of Hispanics who participated in the study said the advertisements were a true representation of life in the Army (Keck and Mueller, table 6). In contrast, 46 % of blacks surveyed agreed, and only 20 % of whites thought the ad accurately portrayed life in the Army (Keck and Mueller, table 6).

The Keck-Mueller study noted that individuals who had not made plans to attend college after high school as a result of financial or other considerations were also more likely to be influenced by the Army recruiting spots.

This study suggested that demographics determine how Army recruitment ads are received by members of the target group.

Likability of Army Television Advertising

The goal of the Army's Advertising and Sales Program is to contact members of the target group at a reasonable cost, put forth a compelling reason for individuals to

contact a recruiter, gain the assistance and support of people who influence prospective recruits, and provide visual aids to help recruiters make their presentation (NGB Pam 601-200, 7-1). To achieve these objectives, Army television ads must be "likable," that is readily or easily liked. The ads must also be relevant to the target group.

Advertisers have long sought to determine what makes a television commercial likable. The theory of likable commercials says viewers who like an ad will respond in a positive manner to the product highlighted. That is - "Like the ad, like the product" (Biel and Bridgewater, 38). Following this reasoning, the likable commercial will also precipitate the receiver to act upon the ad's message. In Army recruiting commercials, the Army is the product and the desired response is for the receiver to establish a recruiting contact, leading to an Army commitment.

In 1990, Biel and Bridgewater in their study "Attributes Of Likable Television Commercials" found people who like a commercial "a lot" were twice as likely to be persuaded by it as those who were neutral toward the same commercial (Biel and Bridgewater 38). Creating a commercial that is likable can be held to be the determining measure of advertising effectiveness.

There are several reasons why the receiver's liking a commercial may improve the chances of the consumer following through with a desired response to the commercial. The receiver may like the commercial because its theme touches on his/her emotions (Biel and Bridgewater, 43), or there may be other reasons for a receiver's receptiveness to an ad, such as a receiver's rational evaluation of the product attributes presented in the commercial.

Must a commercial be entertaining to be likable? Not necessarily, according to Biel and Bridgewater. Their research found the factors that made a commercial likable were varied, and the research indicated that just leaving people with a good feeling did not necessarily translate to good feelings for the commercial, or a propensity to act upon it (Biel and Bridgewater, 38). The entertainment value of a commercial was found to be

important, but not as important as how relevant and meaningful the commercial ultimately was to the receiver (Biel and Bridgewater, 43). As a result of their research, Biel and Bridgewater emphasized perceived relevance and involvement as the primary factors linking a commercial's likability to its actual persuasive impact. Biel and Bridgewater concluded people like commercials they feel are relevant and worth remembering (Biel and Bridgewater, 38-44).

The Army's purpose is not to motivate a receiver to join the Army after watching an Army commercial. Rather, the primary effect the Army seeks is to influence the receiver's receptiveness to the Army to facilitate the success of direct recruiting efforts (NGB Pam 601-200, 7-1). To this end, an ad's likability and relevance play a major role in how recruiters are received when they make an initial contact with a potential recruit.

Recruiters intend want to portray the Army as a great place to gain experience, maturity, and money for college. Because many members of the target group may have had little or no exposure to the Army and are often influenced by certain people in their communities (parents, teachers etc.), ads must also appeal to these influencers as well (NGB Pam 601-200, 7-1. c).

Effectiveness of Army Television Advertising.

Understanding what makes an effective commercial is an advertiser's challenge. One important factor is "brand-differentiation" (Young and Robinson, 51). Brand-differentiation is a difficult task for the Army because the Department of Defense has a policy prohibiting direct comparison ads among the military branches. Direct comparison advertising is an effective method of showcasing the advantages of one product over another. Thus, the Army faces a unique challenge in highlighting its benefits and ensuring that its ads are not confused with ads from other branches of the military.

Young and Robinson in their study on visual connectedness and persuasion found the concept of connectedness in the flow of advertising images is important to

understanding advertising persuasiveness (Young and Robinson, 52). Connectedness refers to how well the viewer can link the images and words to the product.

Young and Robinson discovered the most persuasive ads tend to provide the viewer with more peak visual experiences (Young and Robinson 59). They also found highly persuasive commercials were those whose message was more closely linked to the images shown in the ad (Young and Robinson 59).

In their study "Creative Tactics and the Communication of a 'Good Taste' Message," Lautman and Hsieh discovered complex commercials required the receiver to draw multiple inferences and implications and often led the receiver to tune out the commercial before its message was internalized. An effective method for connecting a product to a message is repetition of the message, including repetition of the message in the "tagline." The tagline's position at the end of the commercial can be expected to gain a disproportionate amount of consumer attention (Lautman and Hsieh, 17).

According to Laskey, Fox and Crask in their study "Investigating the Impact of Executional Style on Television Effectiveness," the effectiveness of commercials is determined more by the dominant traits of commercials than by the individual elements of any single commercial. They recommended commercials be categorized based upon a general theme rather than solely on the presence or absence of one particular advertising element (Laskey, Fox and Crask, 9). In 1974, Shimp proposed four basic commercial categories: Individual Oriented, Story Oriented, Product Oriented and Technique Oriented (Laskey, Fox, and Crask, Table 1).

The Army can be observed using four sub-categories from Shimp's design in its advertising: Personality, Off-Camera Video Drama, Typical Person Endorser, and Narration. These sub-categories appear individually and in combined scenarios in Army ads as follows:

- Personality: An individual engaged in an Army activity is the focus of the commercial, but does not provide a direct testimonial or verbally endorse the Army.

- **Off-Camera Video Drama:** A drama portraying Army life or an Army character by means of dialogue or action is featured in the commercial, but the message is delivered by an announcer who is not part of the drama and who is usually not seen by the audience.
- **Typical Person Endorser:** A message of preference, liking, personal experience, or personal knowledge is presented by a non-celebrity.
- **Narration:** A connected succession of happenings (i.e., a story) is depicted in the video, while an off-camera announcer discusses the advertised product and relates what is transpiring on camera (Laskey, Fox and Crask, Table 1). The distinguishing feature between narration and drama is that a story is told, not dramatized (Lasky, Fox and Crask, 9).

Using these types of executional-style advertising does not seem to have a direct bearing on the persuasiveness of a commercial, but is believed to improve recall and comprehension of the commercial's key message (Lasky, Fox and Crask, 15).

Direct and indirect testing are two methods used to measure the effectiveness of a commercial. Direct testing involves measuring or predicting the sales volume of a particular commercial or campaign (Stanton, Etzel and Walker, 56). An example of this type of testing is counting the number of coupons redeemed from a particular magazine or newspaper ad by tracking unique bar code numbers printed on the coupons. Another method of direct testing is to measure the number of inquiries produced by an ad that encourages receivers to seek additional information (Stanton, Etzel, Walker, 56).

Because most recruitment commercials are not acted upon until some time has elapsed, it is difficult to measure their direct effectiveness. In the Army's case, there is generally a lapse of time between the time a receiver is exposed to an Army commercial and the time a direct contact with a recruiter takes place (NGB Pam 601-200, 7-5). In these situations, indirect testing methods may be better measures for determining effectiveness.

A DESIGN OF STUDY
Description of Method and Study Goals

Summary

The literature review for this study clearly indicates that educational level, social status and race play a role in how much influence advertising will have over the viewer. Research also suggests the manner in which a person views the world will influence the effects of advertising.

In the Army's Advertising and Sales Program, the goal of the recruiter is to contact the most receptive members of the target group and put forth a compelling reason for individuals to contact a recruiter. Understanding the demographic and psychographic characteristics of the target audience will enhance the recruiters' chances of targeting likely candidates. Therefore, it is logical to conclude that additional research designed to better define the target group is necessary.

Table 1
Description of Target Audience

Table 2
Description of Target Audience

1. Educational Level	2. Social Status	3. Race	4. World View
5. Age	6. Gender	7. Income	8. Occupation
9. Marital Status	10. Religion	11. Political Affiliation	12. Military Service
13. Geographic Location	14. Family Size	15. Health Status	16. Employment Status
17. Criminal Record	18. Driving License	19. Military Training	20. Military Experience

3. DESIGN OF STUDY

Description of Method and Study Sample

Methodology

An experiment was conducted with a sample of 66 high school seniors from Huntington, West Virginia, to determine if a relationship exists between the effectiveness of televised Army recruitment advertising and scholastic achievement, post graduation plans, and television viewing preference.

The methodology used for this study was a before-after experiment. This design was chosen to give the researcher some prior knowledge of the attitudes and beliefs the subjects held toward the United States Army before and after the introduction of an independent variable. The before-after design can be diagrammed as follows:

Table 3-1

Group 1 (Control Group): $RY_{b1} Y_{a1}$ Group 2 (Treatment Group): $RY_{b2} XY_{a2}$

Table 3-2
(Explanation of Terms in Table 3-1)

R - random assignment of subjects to experimental conditions.

X - is the independent variable, or the presumed cause on the study. It is produced or manipulated by the researcher. Subjects in the experiment are exposed to it.

X_1 - one level of X
 X_2 - another level of X

Y - is the dependent variable, or the presumed effect that the researcher measures in the subjects. It is the response to X that the researcher wishes to isolate.

Y_b - the measurement or control of Y before the subjects are exposed to X
 Y_a - the measurement of Y after the subjects are exposed to X.
 Y_1 - the measurement of Y for Group 1
 Y_2 - the measurement of Y for Group 2

The researcher chose this design to isolate the effects of the independent variable. Alexis S. Tan discussed this type of experimental design in his book, *Mass Communications Theories and Research*. Tan explains the design as follows:

In this design, we assign subjects to two groups. We then measure Y for both groups before X is introduced to the experimental group. The first measure of Y should be identical or equivalent to the second or "after" measure. This allows us to compare the extent of change in the experimental group ($Y_{a1} - Y_{b1}$), with change in the control group ($Y_{a2} - Y_{b2}$). If X had an effect on Y, the $Y_{a1} - Y_{b1}$ should be significantly greater or less than $Y_{a2} - Y_{b2}$. We can make this conclusion because of the assumption that random assignment of subjects to both groups will make them equal on before-measures of Y, and that outside influences on Y, occurring between the before and after measures, will also be equal. Thus any difference between the after measures should be caused by X.

The experiment was conducted, with the permission of school officials, at three local high schools: St. Joseph's Catholic School, Cabell Midland Senior High and Grace Christian School. Schools were selected based on their location within the Huntington area and their receptiveness to participate in the study. At Cabell Midland Senior High, the principal provided a class of 22 students, based on class schedules. At St. Joseph's and Grace Christian all seniors participated. The total number of seniors who participated in the research was 66.

The experiment was conducted in three separate sessions, one at each of the participating high schools. At each session, subjects were brought into a classroom and told that their teachers had agreed to have them participate in a research experiment. In order to eliminate any tester bias, research assistants were not told the details of the research and the researcher read instructions from a script (See Appendix B).

After reading the instructions, students were randomly assigned to one of two groups. Students were asked to draw a colored marble from a paper bag. This procedure randomly separated the students into two groups. The colors of the marbles were white and clear. The marbles had a smooth surface and weighed 680 grams each. The results

of a trial run determined that students could not distinguish color merely by touch. There was an equal number of white and clear marbles placed in the bag, with the total number of marbles corresponding to the number of students participating in that particular session of the experiment.

Once all the students had chosen a marble the researcher placed one white and one clear marble in the bag and then drew a marble to determine which would be the control group and which would be the treatment group. These procedures ensured students were randomly placed into groups and that group designation was also accomplished randomly.

The researcher conducted the experiment for the three separate treatment groups. The researcher adhered to the same set of instructions as the research assistants.

Group 1 Scenario: (Control Group) After students were seated, a research assistant administered a pre-test designed to determine scholastic achievement, economic status, post graduation plans, college or employment goals following graduation, television programming habits and preferences, and inclination toward joining the Army. After the students finished the pre-test, the research assistant played a 28-minute video. The video contained a stand-up comedy routine by comedian Louie Anderson entitled, "Mom, Louie is Looking at Me Again." This video was selected because of its humor. It was also selected because Anderson is known for not using profanity, referring to sexual themes or using bathroom humor.

Halfway through the video two commercials were played. One commercial was a Ford truck commercial and the other was an MCI Telephone Company advertisement. The Ford commercial was selected because of its appeal to students who may be contemplating purchasing their first car. Ford was selected because of its name recognition. The MCI advertisement was selected because of its high density of television ads and name recognition.

Immediately following the video, the students were administered a post-test (See Appendix A). The pre-test and post-test for each group were identical. Using identical questionnaires allowed the researcher to accurately compare the extent of change in the treatment group to any change found in the control group (Tan 37).

Group 2 Scenario: (Treatment Group) After moving the treatment group students to a different classroom, the researcher administered the pre-test and played the same 28-minute video. At the halfway point, the same Ford truck commercial was shown, but in the place of the MCI ad an Army recruitment advertisement was shown. (see Appendix D) Following the video the post-test was passed out for students to complete.

The results of this study were used to determine if a relationship between students who consider themselves average or below-average students and who do not have career or college plans following graduation, and these students' receptiveness to Army advertisements. Student attitudes toward Army service were measured before and after students were shown the recruitment advertisement. Student receptiveness to the advertisements was measured by noting the degree of change in student responses on the pre-test and post-test to questions about attitudes towards the Army.

The control group was not shown the Army commercial to facilitate in isolating whether the Army recruitment advertisement was the main cause for any perceived change in attitudes toward the Army in the treatment group.

The independent variable in the experiment was the Army recruitment ad. The recruitment ad will be considered effective if a significant positive shift in student attitudes toward the Army is measured in the treatment group, but not in the control group. The experiment will also attempt to draw a relationship for those students who are found to be positively influenced by the ad to the type of television programming they prefer.

Student responses were separated into four different categories based on answers to pre-test and post-test questions about scholastic achievement. Student responses were

also categorized based on responses to post-graduation plans, interest in Army service, economic status and television viewing habits questions. The following Academic categories were used:

Good Student. Students who rate themselves as A or A-B students.

Above Average Student. Students who rate themselves as B or B-C students.

Average Students. Students who rate themselves as primarily C students.

Below Average Students. Students who rate themselves as below C students.

Students were grouped into the following categories based on post-graduation plans:

Plan to Attend College. Students who plan to attend a college or university following graduation.

Do Not Plan to Attend College. Students who do not report plans to attend college after high school graduation.

Not Sure. Students who have not decided if they will attend college following graduation.

Based on pretest and posttest responses to expressed interest in Army service, student responses were categorized in the following manner.

Not Interested. Students who note they have no interest in joining the Army.

Neutral. Students who have not thought of joining the Army, but are not opposed to the idea.

Interested. Students who declare they have considered joining the Army.

Television viewing categories were based on student responses to questions relating to television programming preferences.

Music Television (MTV, VH1, etc.)

Action/Adventure (Walker Texas Ranger, Renegade, etc.)

Situation Comedies (Funniest Home Videos, Seinfeld, etc.)

Daytime Drama (soap Operas)

Talk/Interview shows (Oprah, Ricki Lake, etc.)

Educational (Documentary, History, Animal, etc.)

News Programs (48 Hours, 60 Minutes, etc.)

Nighttime Drama (ER, Law and Order, etc.)

Real Life Drama (Cops, 911, etc.)

Sports (Racing, Football, Basketball, etc.)

Other

To maintain reliability in the study, the pre-tests and post-tests were marked with a "1" or a "2" to identify them with the specific group (all tests administered to Group 1 were marked with a "1" in the upper right-hand corner; group 2 tests were marked in the same manner). The post-tests were distinguished from the pretests by the letter "b" placed after the number 1 or 2.

Data from the pre-tests and post-tests were transcribed to corresponding categories on a worksheet. This was accomplished by placing a number on the worksheet corresponding to each question on the test. To facilitate accurate transcription from the tests to the worksheets, the answer blocks on each test were numbered sequentially.

Sample

The Army targets its advertising at high school seniors and high school graduates ages 17 to 21 (NGB Pam 7-5). Time and monetary constraints dictated conducting the experiment at local high schools. The sample format consisted of seniors whose schedules allowed them to participate. The sample size was determined by the availability of students at the time of the experiment. Although the number of students

who participated in the study was limited, having at least thirty subjects in each group is adequate to determine statistical significance (Tan 34).

Questionnaire

The questionnaires used in this experiment used a structured, closed-format to make it easier for the researcher to quantify, code, analyze, and compare responses among sample members. This format also improved the uniformity from one measure to another.

The questionnaire includes basic demographic information along with questions designed to obtain data about academic achievement, post-graduation plans, television programming preferences, and attitudes toward Army advertisements. The questionnaire also included questions about Ford products, a company featured in one of the commercial spots on the video.

Recruitment Advertisement

The ad selected is entitled "U.S. Army Recon." The ad runs exactly thirty seconds. The ad features a young, white male soldier depicted in scenes alternating between his childhood and his present job in the Army. The soldier is seen engaging in different types of military training. Throughout the ad, he speaks of how various aspects of his childhood prepared him for his military training. The ad ends with the familiar Army ad song "Be All That You Can Be."

The Army provided five separate recruitment ads as possible candidates for this experiment. The ad selected was the only one that did not specifically ask the viewer to enlist in the Army. This ad was also chosen because it was not directly focused at a specific target audience (e.g. females, minorities). The ad portrayed the military as a noble profession without singling out one particular group or encouraging young people to enlist.

The script for the ad is in the "Narration" format described on page 12. During the ad, several scenes are portrayed on camera while a voice (presumably the soldier's) relates how different people during his childhood had prepared him to meet the challenges of military training. In the ad a story is told, not dramatized. The series of non-related scenes shown in the ad are brought together by the narration.

U.S. Army Recon was also selected because it contained several elements described in the Literature Review as being essential for an advertisement to be successful. The ad is emotional, providing the viewer with visual experiences and presenting a scenario in which the viewer can connect emotional scenes in the ad with events from the viewer's own past. This connectedness establishes relevance between the Army and the viewer's own life experiences and makes the viewer more receptive to a direct meeting with a recruiter.

The advertisement appeared more effective than the other ads provided by the Army in providing more peak experiences. Although all the ads evaluated were entertaining, they did not provide the viewer with as many peak visual experiences as U.S. Army Recon. The ad selected provided the viewer with four peak experiences with emotional scenes found in between the peak visuals. According to information contained within the Literature review, the most successful advertisements provide the viewer with peak visual experiences combined with emotional scenes (Biel and Bridgewater 43).

The ad chosen may be more successful in the western West Virginia area because it had a much broader target audience than the other recruitment advertisements. This ad may not appear to directly entice a viewer to contact an Army recruiter, but it attempts to build a positive relationship with the Army. The improved perception can make the ad's viewers more receptive to an initial contact by a recruiter.

U.S. Army Recon was selected because of its broader target audience and because it included many of the elements characterized in the Literature Review as necessary for an advertisement to be successful.

Pilot Study

A pilot study was conducted with four high school seniors who were on the Marshall campus during the summer. The students were given the instructions and then asked to complete the survey. Student responses indicated the questions were clear and understandable. After completion of the questionnaire participants stated that the survey had something to do with the Ford Motor Company, the Army, and television. But, the students could not tell from the questionnaire what was the actual purpose of the experiment.

The video was reviewed by Dr. Dan Brokke, principal of Grace Christian School. His comments indicated that the video contained some profanity and a few comments he found distasteful. The profanity and distasteful comments were edited out of the final version of the video. He found no problems with the advertisements.

Dr. Bob Bickel, professor of Educational Leadership Studies at Marshall University, reviewed the questionnaire to ensure the questions were phrased properly and that a measure could be taken from the responses. Dr. Bickel indicated that a Likert Scale format would be more appropriate than a forced ranking scale on television viewing preference section. A Likert Scale would not only provide data on which shows were the most popular, but also would measure how much a particular type of program was liked or disliked. The adjustments were made to the final copy of the questionnaire.

Experiments 1, 2 and 3

The goal of the researcher, given the different locations and times, was to ensure that the experiments were as similar as possible in settings, temperature, lighting and seating. It was also important that each session be administered using the same controls to ensure internal validity.

Experiment Session 1. The first experiment was conducted at St. Joseph's Catholic High School, in Huntington, West Virginia. The experiment was conducted Wednesday, September 4, 1996, at 9 a.m., during first period. Stan Angion, a captain in the United States Army and a graduate student at Marshall University, was the research assistant. A total of 21 students participated. The control group remained seated in the original classroom, and the treatment group was moved to a classroom in the school library. The thermostats in both rooms were set to 68 degrees and both rooms were illuminated by overhead florescent lights. The students in the control group were seated at desks while students in the treatment group were seated at tables.

The same set of instructions was read to both groups. Both groups were also provided sharpened pencils to complete the surveys. Students in both groups had an unobstructed view of the television. The students appeared to be alert and willing to participate in the experiment.

Experiment Session 2. The second experiment was conducted at Cabell Midland Senior High School, in Ona, West Virginia. The experiment was conducted on Tuesday, September 10, 1996, at 9:30 a.m. during second period. Rich Steele, a United States Army captain and graduate student at Marshall University, was the research assistant. A total of 23 students participated. The control group remained in the original classroom while the treatment group was moved to the school's conference room. The thermostats in both rooms were set to 68 degrees and both rooms were illuminated with fluorescent lights. Once again, students in the control group were seated at desks, while members of the treatment group were seated at tables.

The same set of instructions was read to both groups. Students were also provided sharpened pencils to complete the surveys. Students in both groups had an unobstructed view of the television. Students appeared to be alert and were willing to participate in the experiment.

The same set of instructions was read to both groups. Students were also provided sharpened pencils to complete the surveys. Students in both groups had an unobstructed view of the television. Students appeared to be alert and were willing to participate in the experiment.

Experiment Session 3. The third experiment was conducted at Grace Christian School, in Huntington, West Virginia. The experiment was conducted Thursday, September 19, 1996, at 12:50 p.m. during the first period after lunch. As in the second experiment, Rich Steele was the research assistant. A total of 24 students participated. As with the first two experiments, the control group remained in the classroom and the treatment group was moved to another room. In this case the treatment group was moved to the library. The thermostats in both rooms were set to 68 degrees and both rooms were illuminated with florescent lights. As with the other sessions, students in the control group were seated at desks, while students in the treatment group were seated at tables.

The same set of instructions was read to both groups. Students also were provided with sharpened pencils to complete the surveys. Students in both groups had an unobstructed view of the television. Students were alert and willing to participate in the research.

Research assistants for the experiments were provided with a set of instructions (See Appendix C) to answer any questions students may have had about the questionnaire. Research assistants also were instructed not to allow students to speak to each other or leave the classroom during the experiments. The research assistants were Army captains who are assigned to Marshall University to earn Master's Degrees in Journalism and Mass Communications.

Hypothesis Testing

A correlation analysis was used to determine if a correlation existed between the responses to questions about joining the Army in the pretest and in the posttest for students in the Treatment Group. (Walpole, 193-296, Wimmer, 240-242)

A chi square test was used to determine if a relationship existed among students who were influenced by the recruitment ad and the type of television programs they preferred to watch. (Walpole, 292-294, Wimmer, 246)

An analysis of variance was used to determine if a relationship existed between students who were influenced by the recruitment ad and their post-graduation plans. An analysis of variance was be used to determine if a relationship existed between students who consider themselves average or below-average students and the degree to which they were influenced by the recruitment ad.

Significance Testing

To find the effects of the independent variable (recruitment ad) on the treatment group an analysis of variance was used to determine if a significant statistical difference existed between the pre-test and post-test responses of Group 1 and Group 2. (Walpole, 292-310, Wimmer, 243-248). To reflect the limited size of the number of units in the study, a probability level of 0.05 was used to determine the level of significance.

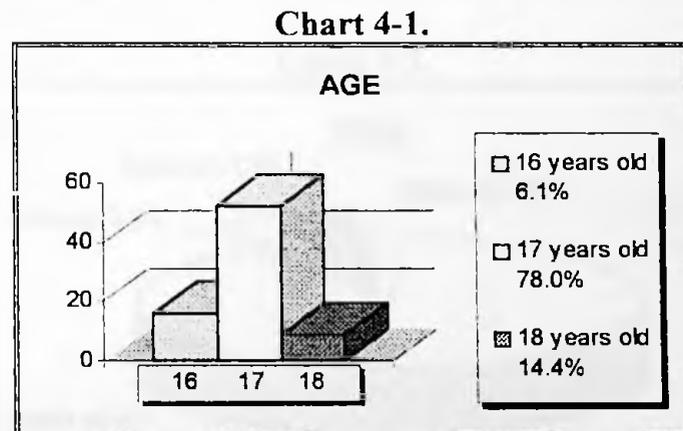
4. ANALYSIS OF DATA

Demographics

Composite Respondent. The typical participant in the experiment was a white, 17-year-old high school senior. He or she earns A's and B's and belongs to the middle income bracket. The typical participant lives in a home with three working televisions and reports watching an average of three hours a day.

The following is a demographic breakdown for all participants. A demographic breakdown for the Control Group and the Treatment Group was listed separately.

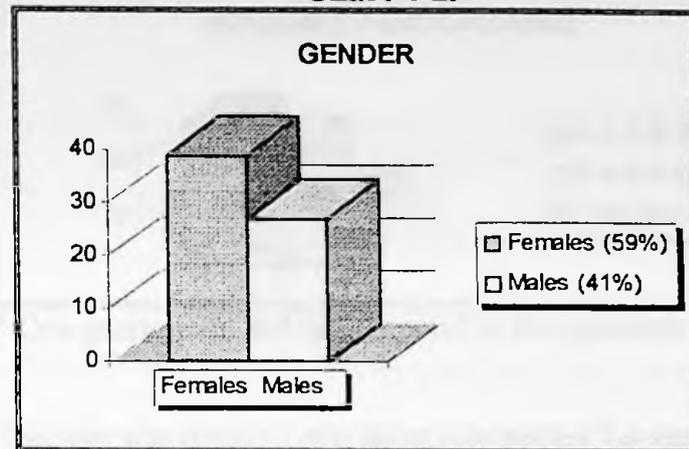
Age. Participants were between 16 and 18 years of age. The age categories and percentages were: 16 years old (6.1%), 17 years old (78.0%), 18 years old (14.4%), one person did not responded (1.5%). The distribution is illustrated in Chart 4-1.



* One person did not respond to the question (1.5%)

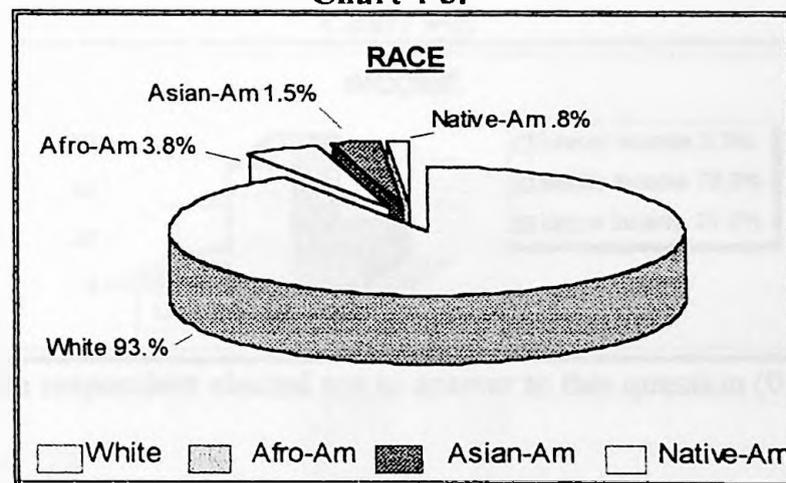
Gender. There were 39 females and 27 males who participated in the experiment. The distribution is illustrated in Chart 4-2.

Chart 4-2.



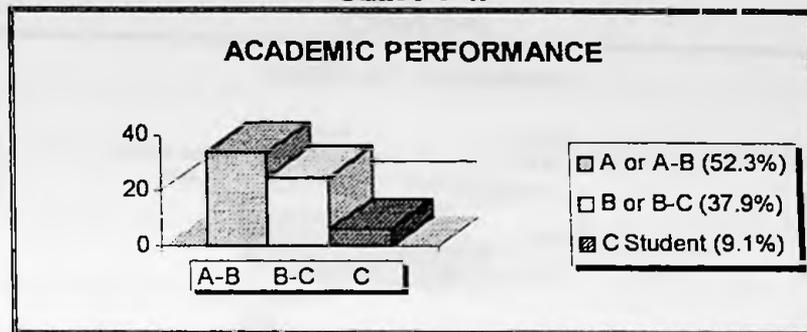
Race/ethnic background. The survey asked participants to indicate their ethnic background. The survey divided race into six categories. The "other" category was for participants who did not belong to one of categories listed on the survey. The race categories and percentages were: White (93.9%), African American (3.8%), Asian-American (1.5%), and Native-American (0.8%). None of the participants marked the "Hispanic" or "other" category.

Chart 4-3.



Academic performance. Academic achievement was divided into four categories: good student (A or A-B), above average student (B or B-C), average student (primarily C), and below average student (frequently below a C). Population percentages are as follows: good student (52.3%), above average student (37.9%), average student (9.1%), and below average student (0.0%). The distribution is illustrated in Chart 4-4.

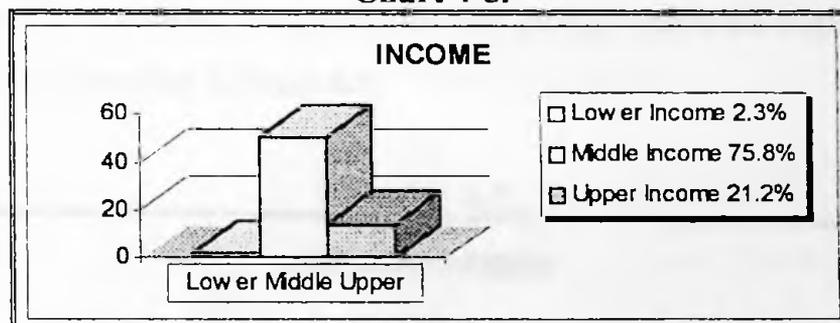
Chart 4-4.



* One participant did not respond to the question (0.7%).

Income. Income was divided into three categories: Lower income bracket, middle income bracket, and higher income bracket. A dollar amount was not assigned to this demographic question because it was unclear if all students would know how much their parents earned. Students were asked to pick a category they felt best represented their families' income. The respondent population was: lower income bracket (2.3%), middle income bracket (75.8%), and upper income bracket (21.2%). One person elected not to respond to the question. The distribution is illustrated in Chart 4-5.

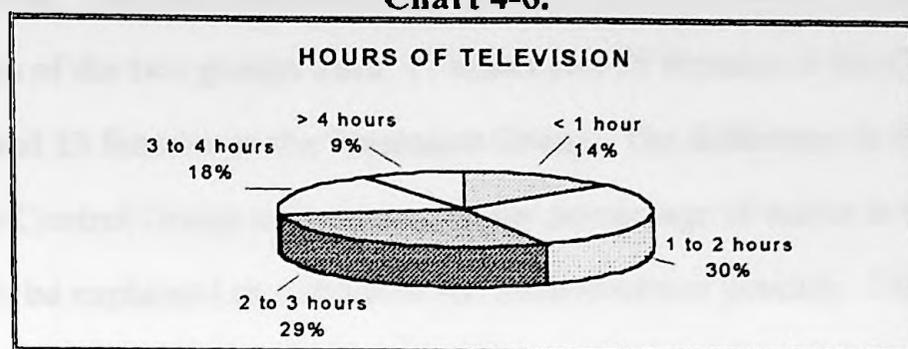
Chart 4-5.



* One respondent elected not to answer to this question (0.7%).

Television viewing. Students were asked to indicate how much television they watched per-day. Student responses indicated: 13.8% watched less than one hour of television per-day, 29.2% watched one to two hours per-day, 29.2% watched two to three hours a day, 18.5% watched three to four hours per-day, and 9.2% watched more than four hours of television per-day. The distribution is illustrated in Chart 4-6.

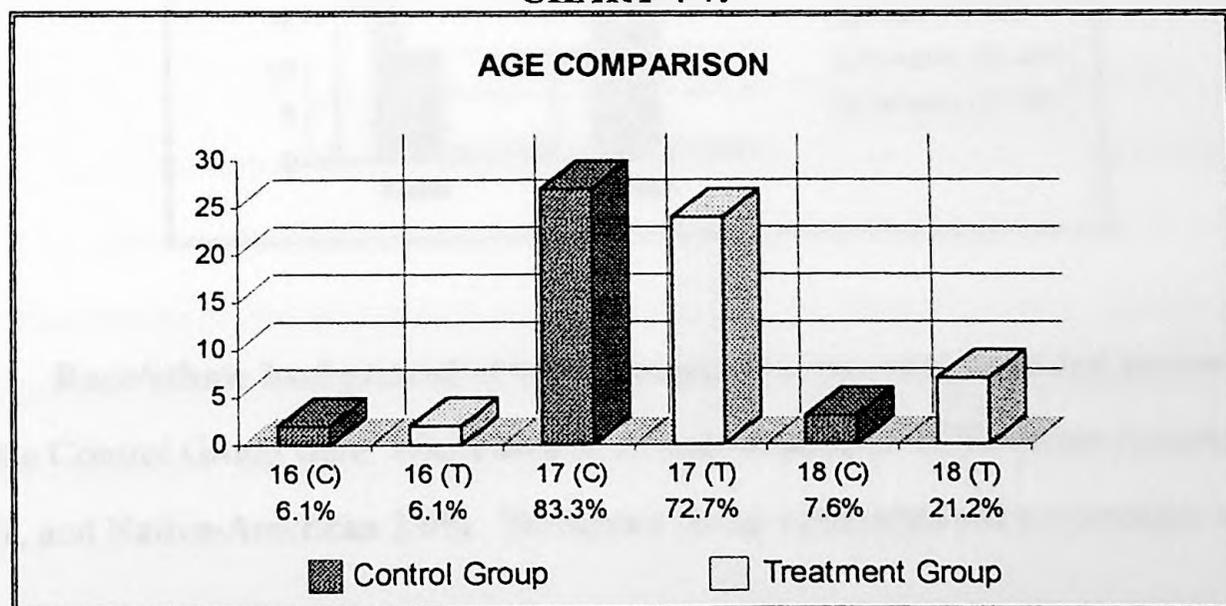
Chart 4-6.



Demographics of the Control Group and the Treatment Group. The following is a comparison between Control Group and the Treatment Group demographics .

Age. The age of participants for the Control Group and the Treatment Group are nearly the same. The range is from 16 to 17 years old. There is a variation among 17 and 18 year old participants between the groups. The percentage of 17 year olds in the control Group is 10 % higher than in the Treatment Group. The percentage of 18 year old students in the Treatment Group is 13.6% higher than the percentage of 18 year old students in the Control Group. The difference in the ages in the two groups is a result of the randomization process used to separate the two groups before the experiment began. The distribution is illustrated in Chart 4-7.

CHART 4-7.



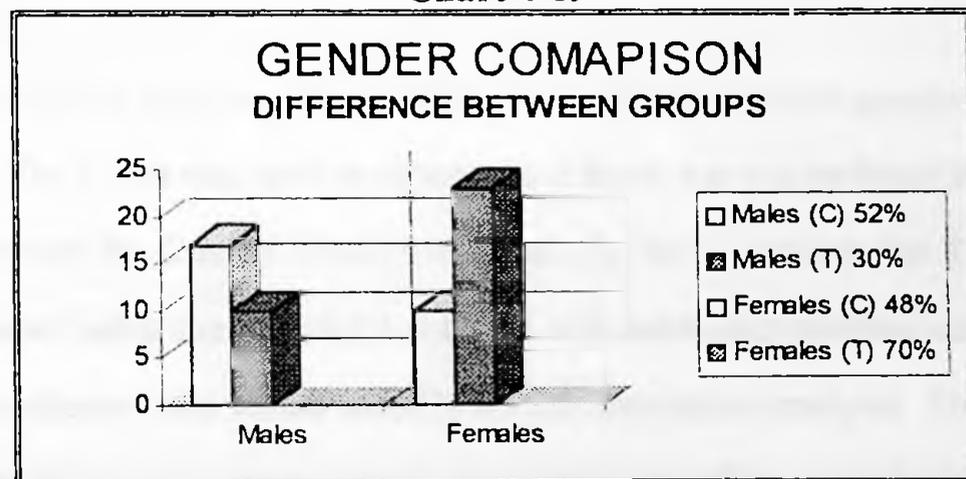
* One respondent in the Control Group elected not to answer the question.

GENDER. The total population consisted of 27 males and 39 females.

The populations of the two groups were: 17 males and 16 females in the Control Group and 10 males and 23 females in the Treatment Group. The difference in the percentages of males in the Control Group as compared to the percentage of males in the Treatment Group can only be explained as a result of the randomization process. The population distribution is illustrated in Chart 4-8.

The process for randomly separating participants into different groups was strictly adhered to. Upon analysis of data it was apparent that there was a significant difference in gender between the two groups. This difference is attributed to fluke random assignment. This difference does not invalidate or render the results uninterpretable. The ANOVA *F* test is derived by taking into account that the random process by which groups are formed will sometimes produce groups that are dissimilar and thus is valid regardless of the distribution of values on the covariance (Maxwell and Delaney, 381).

Chart 4-8.



Race/ethnic background of both groups. The race categories and percentages for the Control Group were: White 88.0%, African-American 3.0%, Asian-American 6.0%, and Native-American 3.0%. Treatment Group categories and percentages were:

White 94.0%, African-American 6.0%. The population distribution is illustrated in table 4-1.

Table 4-1.

	Control Group	Treatment Group
African-American	1 (3.0%)	2 (6.0%)
Native-American	1 (3.0%)	
Asian-American	2 (6.0%)	
White	29 (88.0%)	31 (94.0%)
TOTAL	33 (100%)	33 (100%)

The statistical analysis for this experiment was conducted using the Statistical Package for the Social Sciences (SPSS-X). This program is designed to analyze research in the social science field. All data were coded and entered in SPSS-X by a single research technician. Descriptive statistics were used to determine initial preferences and demographic information. Analysis of this information yielded frequencies, percentages, distributions, and mean values of the variables.

Hypotheses.

The first hypothesis was tested by entering the responses of both groups into a two-tailed t-Test. The t-Test was used to determine if there was a significant statistical difference between the Control Group's responses on the post-test to the Treatment Group's responses, after the introduction of the treatment (independent variable). The remaining hypotheses were tested with BI-variant correlation analysis. Hypotheses were tested by correlating responses to survey questions (dependent variable) before and after the introduction of the recruitment advertisement (independent variable). Correlation analysis was used to measure the relationship between two or more variables and to determine if there was a positive relationship between these variables and an affinity towards the Army.

Hypothesis 1. Army advertisements have a short-term positive impact on high school seniors ages 17 to 21.

Survey questions 4, 6, 9, and 13 were designed to collect information to support or reject hypotheses one. These questions were designed to measure the attitudes of the Treatment Group to the Army, before and after exposure to an Army recruitment advertisement. The results from the Control Group were used to ensure that any movement in responses in the Treatment Group were due to exposure to the treatment and not from a confounding factor.

(1). **Question 4.** The Army is a good place to mature.

The Control Group's pre-test responses indicate that 6.1% strongly agreed with the statement, 51.4% agreed, 27.3% were neutral, 9.1% disagreed, and 6.1% strongly disagreed with the statement. The Treatment Group's responses indicate that 9% strongly agreed with the statement, 54.5% agreed, 24.2% were neutral, 9.1% disagreed, and 3% strongly disagreed with the statement. The results are illustrated in Table 4-2.

Table 4-2. Pre-test results for both groups to Question 4. *The Army is a good place to mature.*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	6.10%	51.40%	27.30%	9.10%	6.10%
Treatment Group	9.10%	54.50%	24.20%	9.10%	3.00%

The Control Group's post-test responses to question 4 indicate that 6.1% strongly agreed with the statement, 48.5% agreed, 30.3% were neutral, 12.1% disagreed, and 3.0% strongly disagreed. The Treatment Group's post-test results indicate that 6.1% strongly agreed with the statement, 51.5% agreed, 30.3% were neutral, and 12.1% strongly disagreed with the statement. The results are illustrated in Table 4-3.

Table 4-3. Post-test results from both groups to question 4. *The Army is a good place to mature.*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	6.10%	48.50%	30.30%	12.10%	3.00%
Treatment Group	6.10%	51.50%	30.30%	12.10%	0.00%

(2). **Question 6.** The Army offers young adults a good alternative to college.

The Control Group's pre-test responses indicate that 6.1% strongly agreed with the statement, 54.5% agreed, 18.2% were neutral, 6.1% disagreed, and 15.2% strongly disagreed with the statement. The Treatment Group's pre-test results indicate that no one strongly agreed with the statement, 72.7% agreed, 12.1% were neutral, 12.1% disagreed, and 3.0% strongly disagreed with the statement. The results are illustrated in Table 4-4.

Table 4-4. Pre-test results from both groups to question 6. *The Army offers young adults a good alternative to college.*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	6.10%	54.50%	18.20%	6.10%	15.20%
Treatment Group	0.00%	72.70%	12.10%	12.10%	3.00%

The Control Group's post-test results to question 6 indicate that 3.0% strongly agreed with the statement, 54.5% agreed, 27.2% were neutral, 9.1% disagreed, and 6.1% strongly disagreed with the statement. The Treatment Group's post-test results indicate that no one strongly agreed with the statement, 57.5% agreed, 33.3% were neutral, 6.1% disagreed, and 3.0% strongly disagreed. The results are illustrated in Table 4-5.

Table 4-5. Post-test results from both groups to question 6. *The Army offers young adults a good alternative to college.*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	3.00%	54.50%	27.20%	9.10%	6.10%
Treatment Group	0.00%	57.50%	33.30%	6.10%	3.00%

(3). **Question 9.** The Army provides better opportunities to gain work experiences than other post graduation institutions (college, trade schools, etc.).

The Control Group's pre-test responses to question 9, indicate that no one strongly agreed with the statement, 27.3% agreed, 27.3% were neutral, 39.3% disagreed, and 6.1% strongly disagreed with the statement. The Treatment Group's pre-test responses indicate that no one strongly agreed with the statement, 15.7% agreed, 43.8% were neutral, 34.3% disagreed, and 6.2% strongly disagreed with the statement. The results are illustrated in Table 4-6.

Table 4-6. Pre-test results from both groups to question 9. *The Army provides better opportunities to gain work experiences than other post graduation institutions (college, trade schools, etc.)*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	0.00%	27.30%	27.30%	39.00%	6.10%
Treatment Group	0.00%	15.70%	43.80%	34.30%	6.20%

The Control Group's post-test results to question 9 indicate that no one strongly agreed with the statement, 24.2% agreed, 21.2% were neutral, 42.4% disagreed, and 12.1% strongly disagreed with the statement. Treatment Group post-test results to question 9 indicate that no one strongly agreed with the statement, 27.3% agreed, 21.2%

were neutral, 45.4% disagreed, and 6.1% strongly disagreed with the statement. The results are illustrated in Table 4-7.

Table 4-7. Post-test results from both groups to question 9. *The Army Provides better opportunities to gain work experiences than other post graduation institutions (college, trade schools etc.).*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	0.00%	24.20%	21.20%	42.40%	12.10%
Treatment Group	0.00%	27.30%	21.20%	45.40%	6.10%

(4). **Question 13.** I am considering joining the Army.

The Control Group's pre-test responses to question 13 indicates that no one strongly agreed with the statement, 6.1% agreed, 21.2% were neutral, 36.4% disagreed, and 36.4% strongly disagreed with the statement. Treatment Group's responses indicates that no one strongly agreed, 6.1% agreed, 9.1% were neutral, 18.2% disagreed, and 66.7% strongly disagreed with the statement. The results are illustrated in Table 4-8.

Table 4-8. Pre-test results from both groups to question 13. *I am considering joining the Army.*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	0.00%	6.10%	21.20%	36.40%	36.40%
Treatment Group	0.00%	6.10%	9.10%	18.20%	66.70%

The Control Group's post-test responses to question 13 indicates that no one strongly agreed with the statement, 6.1% agreed, 18.2% were neutral, 39.4% disagreed, and 36.4% strongly disagreed. The Treatment Group's responses indicates that 3.0%

strongly agreed with the statement, 6.1% agreed, 9.1% were neutral, 24.2% disagreed, and 57.5% strongly disagreed with the statement. The results are illustrated in Table 4-9.

Table 4-9. Post-test results from both groups to question 13. *I am considering joining the Army.*

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Control Group	0.00%	6.10%	18.20%	39.40%	36.40%
Treatment Group	3.00%	6.10%	9.10%	24.20%	57.50%

Mean scores were obtained from responses to questions 4, 6, 9, and 13 from the pre-tests and post-tests from the Control Group and the Treatment Group. The population mean scores from these questions are shown in Table 4-10. A two-tailed t-Test was used to determine if there were statistically significant differences between responses to the pre-test and post-test for the Control Group. The same method was also used to determine statistical significance between pre-test and post-test scores from the Treatment Group.

Finally, the results of the two groups were compared together, to determine any statistical significance between responses on the pre-test and post-test for the Control Group and Treatment Group

Table 4-10.

	Control Group		Treatment Group	
	Mean Scores		Mean Scores	
	Pre-test	Post-Test	Pre-Test	Post-Test
Question # 4	3.52	3.42	3.58	3.52
Question # 6	3.27	3.52	3.55	3.45
Question # 9	2.76	2.58	2.88	2.70
Question # 13	1.97	2.09	1.58	1.73

The results from t-Tests calculated on the means scores of questions 4, 6, 9, and 13 on the Control Group's responses indicated no statistical significance between the pre-

test and post-test. The results of the t-Tests calculated on the mean scores of questions 4, 6, and 9 to Treatment Groups responses, also indicated no statistical significance between pre-test and post-test. The results of the t-Test calculated on the mean scores of question 13 from the Treatment Group did not prove to be statistically significant, but a moderate positive shift of 0.27 was noted.

The results of t-Tests calculated on the comparisons between the Control Group and Treatment Group revealed no statistical significance between corresponding questions from either group between pre-test and post-test responses. Therefore, the null hypothesis for Hypothesis One is accepted.

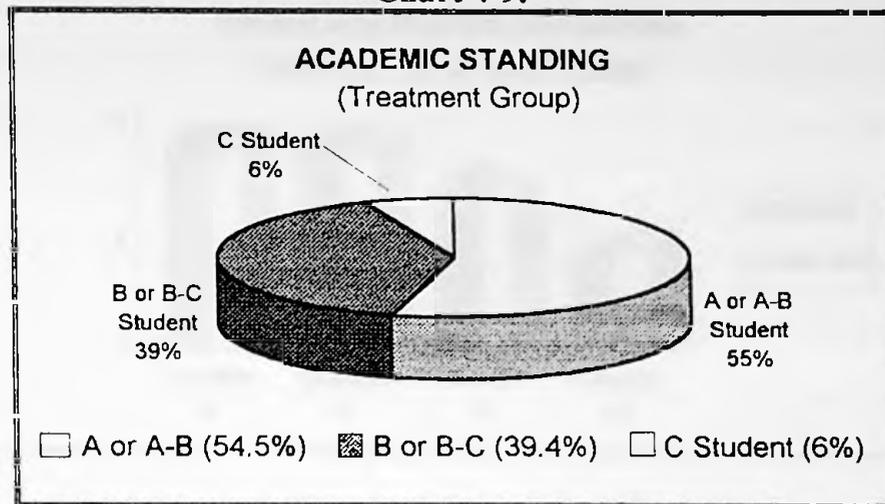
Hypothesis 2. *Army recruitment advertising is most effective on high school seniors between the ages of 17 and 21, who report they are average students.*

Survey question 32 was designed to provide information concerning academic performance. Survey questions 4, 6, 9, and 13 were designed to collect information that would indicate a change in attitudes about the Army after exposure to the recruitment advertisement. Comparisons and analysis used to accept or reject hypotheses 1-2 were gathered from the Treatment Group only because it was the group exposed to the treatment (recruitment advertisement).

(1) **Question 32.** I consider myself to be a: good student (A or A-B), above average student (B or B-C), average student (primarily C), and below average student (frequently below a C).

Treatment Group responses indicate that 18 participants are above average or an A or A-B students, 13 are average or a B or B-C students, 2 are average or a primarily C students, and no one is identified as being a below average student. Chart 4-9 illustrates the Treatment Group's distribution of responses to question 32.

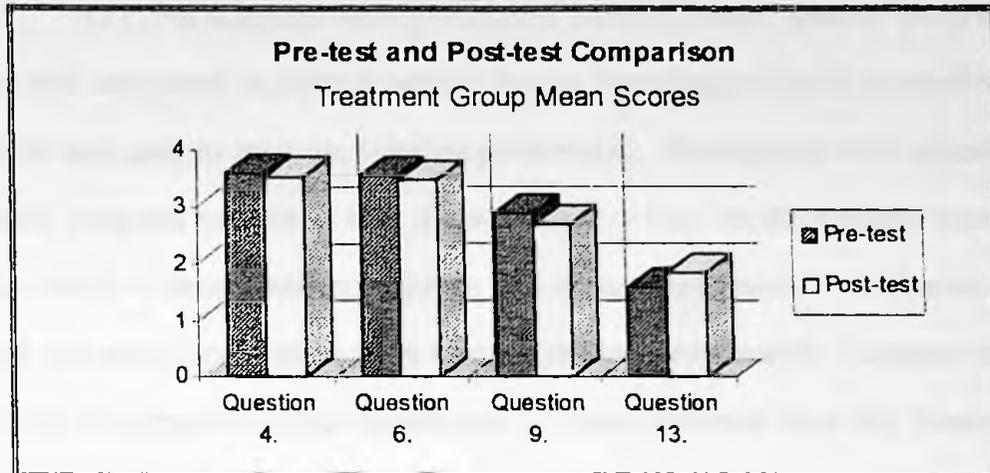
Chart 4-9.



- (2) **Question 4.** The Army is a good place to mature.
- (3) **Question 6.** The Army offers young adults a good alternative to college.
- (4) **Question 9.** The Army provides better opportunities to gain work experiences than other post graduation institutions (college, trade schools, etc.).
- (5) **Question 13.** I am considering joining the Army.

These questions were designed to measure attitudes towards the Army before and after exposing participants to a recruitment advertisement. Pre-test and post-test mean scores are broken down as follows: Question 4. pre-test 3.58, post-test 3.52, Question 6. pre-test 3.55, post-test 3.45, Question 9. pre-test 2.88, post-test 2.70, and Question 13. pre-test 1.58, post-test 1.73. Chart 4-10 provides a graphic illustration of the distribution of means between the pre-test and post-test. For a breakdown of responses by category (strongly agree, agree, neutral, etc.) refer to Tables 4-2 through 4-9.

Chart 4-10.



Correlation analysis was conducted between academic standing and each dependent variable (questions 4, 6, 9, and 13) to test for associations of statistical significance at the .05 level. Results, shown in Table 4-11, indicate no statistically significant associations were found between grades and the dependent variables.

Table 4-11. Depicts the Correlation Coefficients between academic standing and the dependent variables below. The significance level was set at $\geq .05$.

Dependent Variables	Academic Standing
4. The army is a good place to mature.	-0.0851
6. The Army offers young adults a good alternative to college.	0.0084
9. The Army provides better opportunities to gain work experiences than other post graduation institutions.	-0.2085
13. I am considering joining the Army	-0.1173

Therefore, the null hypothesis is accepted for Hypothesis Two. Army recruitment advertising is most effective on high school seniors between the ages of 17 and 21, who consider themselves to be average students.

3. Army recruitment advertising is most effective on individuals within the target group who have similar television viewing preferences.

(1). Participants were provided a list of different types of program categories and instructed to place a number beside the category based on preference. A Likert Scale was used to measure viewing preferences. Participants were asked to place a five beside program categories they always watch, a four beside program categories they often watch, a three beside categories they sometimes watch, a two beside categories they watch not often, and a one beside categories they never watch. Comparisons and analysis used to support or reject hypotheses 1-3 were gathered from the Treatment Group's post-test responses.

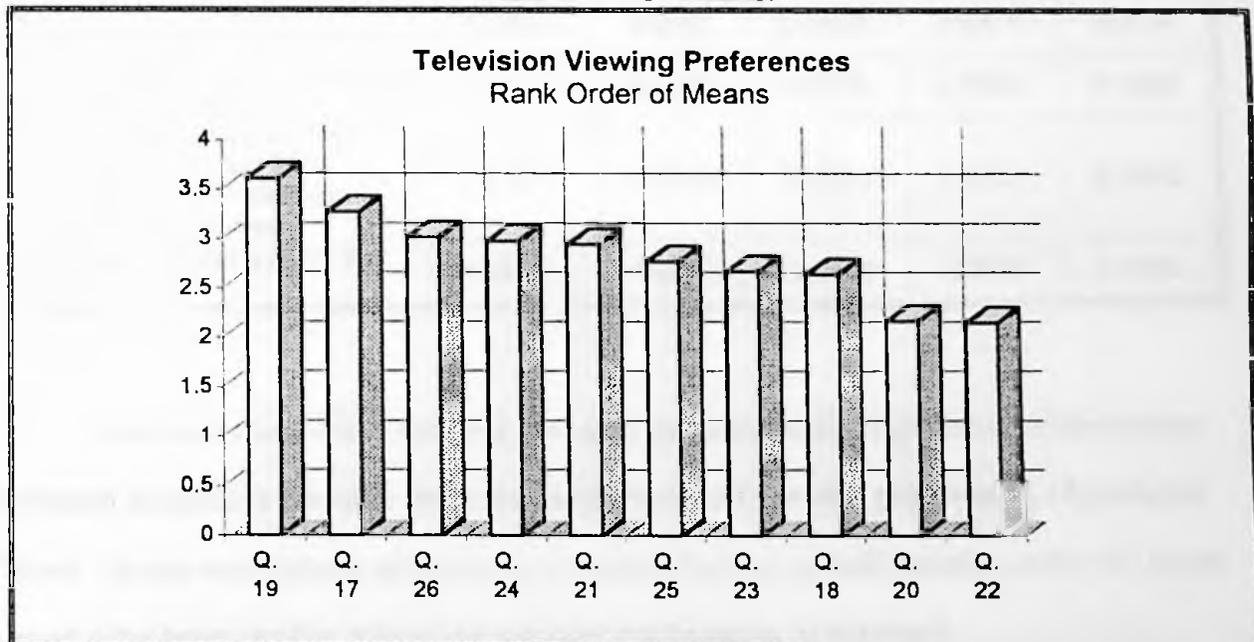
Questions 17 through 21 provided the list of possible program categories.

17. Music Television (MTV, VH1, etc.)
18. Action/Adventure programs (Walker Texas Ranger, Renegade, etc.)
19. Situation Comedies (Funniest Home Videos, Seinfeld, etc.)
20. Daytime Drama (soap operas)
21. Talk/Interview (Oprah, Ricki Lake, etc.)
22. Educational (documentary, history, animal, etc.)
23. News programs (48 Hours, 60 Minutes, etc.)
24. Nighttime Drama (ER, Law and Order, etc.)
25. Real Life Drama (Cops, 911, etc.)
26. Sports (racing, football, basketball, etc.)
27. Other

Survey questions 17 through 27 were designed to measure the viewing preferences in order to collect information that would support or reject Hypothesis Three. Table 4-12 illustrates the population distributions of television viewing preferences by percentages and Chart 4-11 provides a graphic illustration of mean scores.

Table 4-12. Responses to questions 17-27

	Always	Often	Someteimes	Not often	Never
17. Music Television	15.20%	33.30%	30.30%	12.10%	12.10%
18. Action/Adventure programs	9.10%	18.20%	30.30%	21.20%	21.10%
19. Situation Comedies	18.20%	27.30%	45.40%	9.10%	0.00%
20. Daytime Drama	12.10%	6.10%	18.20%	15.20%	48.40%
21. Talk/Interview shows	6.10%	15.20%	42.40%	27.30%	9.10%
22. Educational programs	3.00%	18.20%	12.10%	30.30%	36.40%
23. News programs	3.00%	15.20%	33.30%	36.40%	12.10%
24. Nighttime Drama	9.10%	18.20%	42.40%	18.20%	12.10%
25. Real life drama	6.10%	15.20%	36.40%	30.30%	12.10%
26. Sports	21.20%	21.20%	18.20%	12.10%	18.20%

Chart 4-11. Illustrates the population distributions of television viewing preferences by rank order of means.

Correlation analyses were conducted between designated variables (questions 17 through 27) to test for associations of statistical significance at the .05 level. Results,

shown in table 4-13, indicate no statistically significant associations between television viewing preferences (Dependent variables) and an affinity towards the Army.

Table 4-13. Depicts the Correlation Coefficients between the Army and the television viewing preferences. The level of significance was set at $> .05$.

Dependent Variables	Music Television	Action Adventure	Situation Comedy	Daytime Drama	Talk/ Interview Program
4. The Army is a good place to mature.	0.051	-0.1568	0.1148	0.1521	0.1313
6. The Army offers young adults a good alternative to college.	0.2698	-0.1049	0.1006	0.115	0.2137
9. The Army provides better oppotunities to gain work experiences than other post graduation institutions.	0.1108	0.0468	-0.1059	0.1626	0.1543
13. I am considering joining the Army.	0.0171	0.1256	-0.1364	-0.2787	-0.2417

Continuation of Table 4-13.

Dependent Variables	Educational Programs	News Programs	Nighttime Drama	Real Life Drama	Sports
4. The Army is a good place to mature.	0.0293	0.0067	0.3428	0.0871	-0.014
6. The Army offers young adults a good place to mature.	-0.0449	0.2169	0.2533	0.0998	0.1205
9. The Army provides better opportunities to gain work experiences than other post graduation institutions.	-0.027	-0.2324	0.0955	0.0084	-0.1813
13. I am considering joining the Army.	0.0445	-0.0289	-0.2501	0.0032	0.2744

Because correlation analysis revealed no statistically significant relationships between an affinity towards the Army and television viewing preferences Hypothesis Three, Army recruitment advertising is most effective on individuals within the target group who have similar television viewing preferences, is rejected.

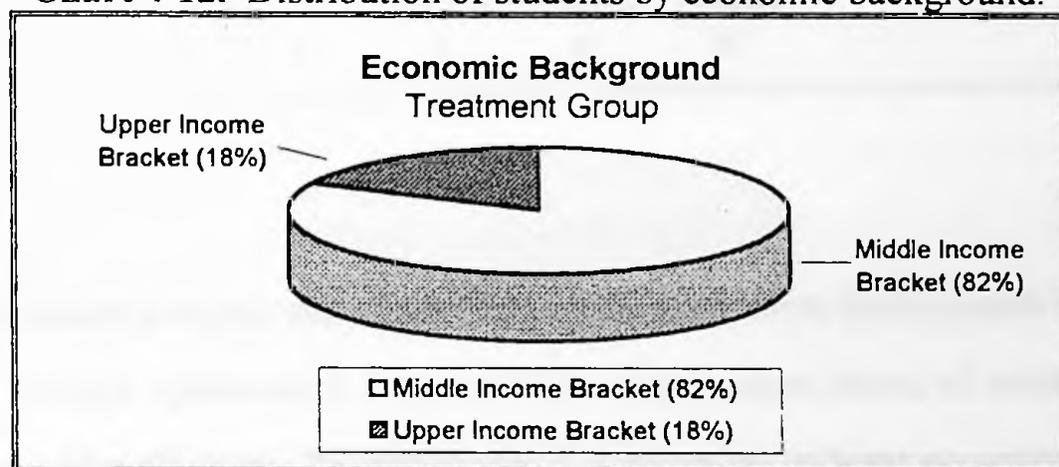
Hypothesis 4. *Army recruitment advertising is most effective on high school seniors that are of similar lower class economic backgrounds.*

Survey question 34 was designed to provide information concerning the students perceived economic status. Survey questions 4, 6, 9, and 13 were designed to collect information that would indicate a change in attitudes about the Army after exposure to a recruitment advertisement. Comparisons and analysis used to accept or reject hypotheses 1-4 were gathered from the Treatment Group only because it was the group exposed to the recruitment advertisement.

(1) **Question 34.** I consider my family to be in the following income bracket: lower income bracket, middle income bracket, and upper income bracket.

Treatment Group responses indicate that 27 students said their families belong to the middle income bracket, 6 indicated that they belong to the upper income bracket, and no one indicated that they belong to the lower income bracket. Chart 4-12 illustrates this distribution.

Chart 4-12. Distribution of students by economic background.



* No one selected the lower income bracket

(2) **Question 4.** The Army is a good place to mature.

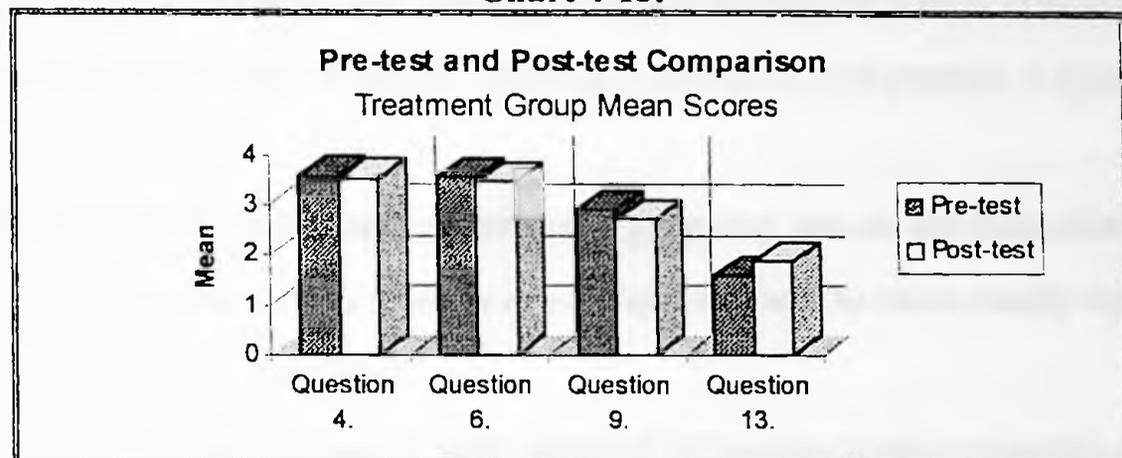
(3) **Question 6.** The Army offers young adults a good alternative to college.

(4) **Question 9.** The Army provides better opportunities to gain work experiences than other post graduation institutions (college, trade schools, etc.).

(5) **Question 13.** I am considering joining the Army.

These questions were designed to measure attitudes towards the Army before and after exposing participants to recruitment advertising. Pre-test and post-test mean scores are broken down as follows: Question 4. pre-test 3.58, post-test 3.52, Question 6. pre-test 3.55, post-test 3.45, Question 9. pre-test 2.88, post-test 2.70, and Question 13. pre-test 1.58, post-test 1.85. Chart 4-13 provides a graphic illustration of the distribution of means between the pre-test and post-test. For a breakdown of responses by category (strongly agree, agree, neutral, etc.) refer to Tables 4-2 through 4-9.

Chart 4-13.



Correlation analysis was conducted between economic backgrounds and each dependent variable (questions 4, 6, 9, and 13) to test for associations of statistical significance at the .05 level. Results shown in Table 4-14, indicate no statistically significant associations between socio-economic status and the dependent variables.

Table 4-14. Depicts the Correlation Coefficients between economic background and the dependent variables listed below. The significance level was set at $\geq .05$.

Dependent Variables	Economic Background
4. The army is a good place to mature.	-0.0965
6. The Army offers young adults a good alternative to college.	0.0186
9. The Army provides better oppotunities to gain work experiences than other post graduation institutions.	-0.1178
13. I am considering joining the Army	0.0711

Therefore, hypothesis four, Army recruitment advertising is most effective on high school seniors that are of similar lower class economic backgrounds, is rejected.

Hypothesis 5. *Individuals within the target group who do not have clearly defined post-graduation plans (college or employment) will be more readily influenced by Army recruitment advertising.*

Survey questions 10 and 11 were designed to measure student concerns about their future before and after the introduction of the recruitment advertisement. Question 13 was designed to measure students' attitudes towards joining the Army. A correlation analysis was then used to compare pre-test and post-test responses to questions 10, 11, and 13.

(1). **Question 10.** I am planning on attending college after graduation.

Treatment Group results from the pre-test indicate that 23 students strongly agreed with the statement, 6 agreed, 3 were neutral, 1 disagreed with the statement, and no one strongly disagreed with the statement. On the post-test students' responses indicate that 22 students strongly agreed with the statement, 7 agreed, 3 were neutral, 1 disagreed, and no one strongly disagreed with question 10. Chart 4-14 and Table 4-15 illustrate the difference between pre-test and post-test responses.

(2). **Question 11.** I am concerned about my future.

Treatment Group results from the pre-test indicate that 25 students strongly agreed with the statement, 7 agreed, 3 were neutral, 1 disagreed, and no one strongly disagreed. Post-test results indicate that 24 students strongly agreed, 8 agreed, 1 was neutral, and no one either disagreed or strongly disagreed with the statement. Chart 4-14 and Table 4-15 illustrate the difference between pre-test and post-test responses.

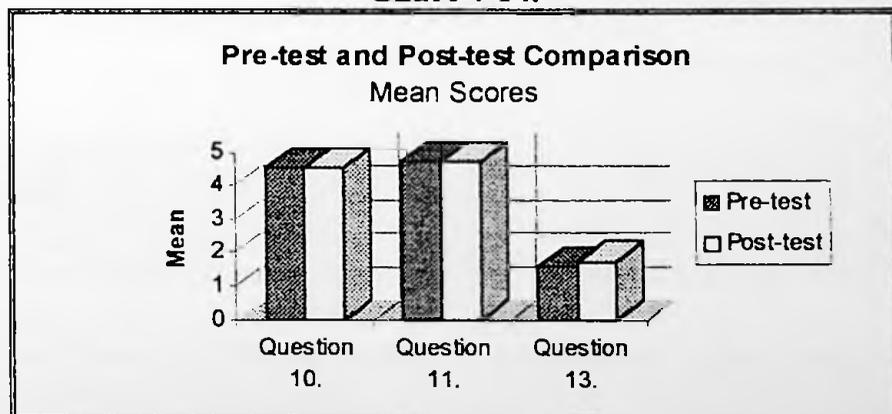
(3). **Question 13.** I am considering joining the Army.

Treatment Group results from the pre-test indicate that no one strongly agreed with the statement, 2 agreed, 3 were neutral, 7 disagreed, and 22 strongly disagreed. Post-test results indicate that 1 person strongly agreed with the statement, 2 agreed, 3 were neutral, 8 disagreed and 19 strongly disagreed. Chart 4-14 and Table 4-15 illustrate the differences between pre-test and post-test responses.

Table 4-15. Comparison of pre-test and post-test mean scores.

	Pre-test	Post-test
10. I am planning on attending college.	4.55	4.52
11. I am concerned about my future.	4.7	4.7
13. I am considering joining the Army	1.58	1.73

Chart 4-14.



Correlation analysis was conducted between students' college plans, and concerns about the future and joining the Army (questions 10, 11, and 13) to test for associations of statistical significance at the .05 level. Results shown in Table 4-16, indicate no statistically significant associations between the Army and college plans and concerns about the future.

Table 4-16. Correlation Coefficients between joining the Army and the designated dependent variables. The significance level was set at $> .05$

Dependent Variable	13. I am considering joining the Army.
10. I am planning on attending college after graduation.	-0.4548
11. I am concerned about my future.	-0.0734

Therefore, hypothesis five, Individuals within the target group who do not have clearly defined post-graduation plans (college or employment) will be more readily influenced by Army recruitment advertising, is rejected.

5. DISCUSSION

This experiment examined the effects of Army recruiting advertising on high school seniors ages 17 to 21. The goal of this experiment was to determine if recruiting advertisements have an effect on high school seniors based on the respondent's socio-economic status, academic performance, television viewing preferences and post-graduation plans. This was accomplished by administering a pre-test, exposing students to an advertisement and then querying participants to ascertain if a positive shift in attitudes occurred after viewing the advertisement.

Overall, the research indicates that recruitment advertisements have no short-term effect on high school seniors. The results noted no relationship between academic performance, economic background and post-graduation plans and an affinity towards enlisting in the Army. The research did indicate a slight positive shift in attitudes toward the Army in students who reported watching sports programming.

The remainder of this chapter will discuss demographics, hypotheses findings, non-hypotheses findings, the effects of recruitment advertising on high school students and a summary. Recommendations will also be suggested.

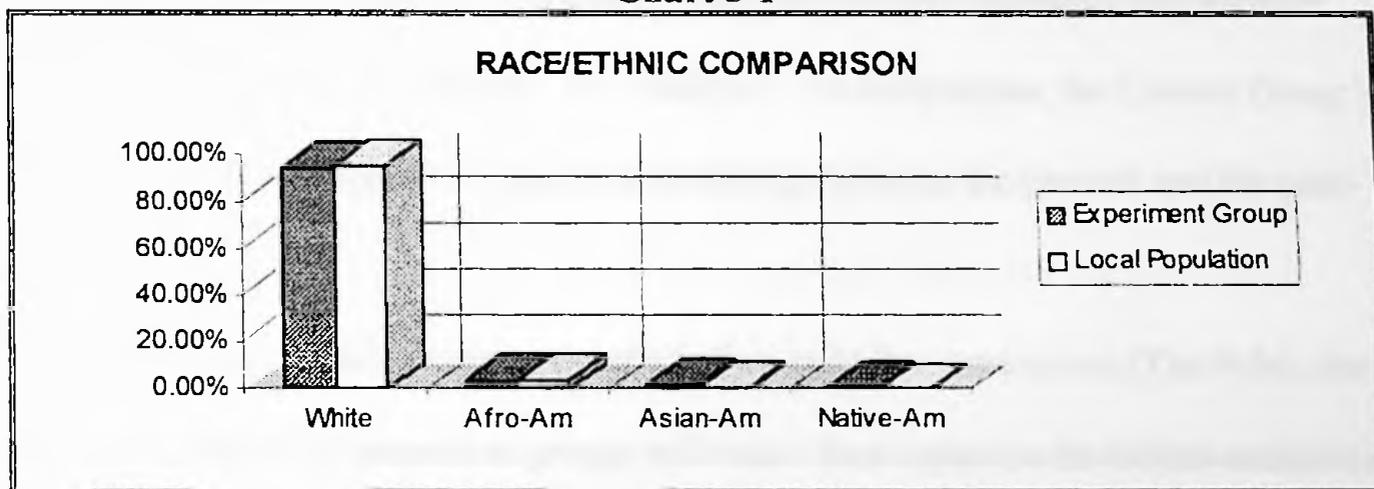
Demographics

Race/ethnic background. A total of 66 high school students from three local high schools participated in the experiment. The typical participant was a white, 17-year-old high school senior. He/she earns A's and B's and belongs to the middle-income

bracket. The typical participant lives in a home with three working television sets and reports watching an average of three hours of television programming per day.

The racial and ethnic percentages found within the experiment are consistent with percentages found in the local community (Reinke 5). The survey consisted of 60 white students or 93.9 percent of the sample population, 3 (3.8 percent) African-Americans, 2 (1.5 percent) Asian-Americans, and 1 (0.8 percent) Native-American. The ethnic background in the Huntington metropolitan area is 94.9 percent white, 4 percent African-American, 0.6 percent Asian-American, and 0.18 percent Native-American. Race categories and percentages are illustrated in Chart 5-1.

Chart 5-1



HYPOTHESES

Hypothesis One. *Army advertisements have a short-term positive impact on high school seniors ages 17 to 21.*

The data regarding the impact of Army advertising on students in the Treatment Group accept the null hypothesis. After the treatment (Army advertisement) was administered, results from both groups were tested and compared using two-tailed t-Tests. These tests were used to determine if a statistically significant difference existed

between the groups. Results from the tests were compared to establish levels on a Distribution of t chart to determine statistical significance (Wimmer 420). The analysis indicated no significant differences between responses from either group.

Even though results were not statistically significant, on the question relating to joining the Army a positive shift in the mean score of responses was noted. The Treatment Group's pre-test mean score for Question 13 was 1.57. The mean score for the same question on the post-test was 1.73. While this is a small shift, it is a positive one. In fact, on the pre-test no one selected "Strongly Agree" when asked if they would consider joining the Army. After exposure to the advertisement, one person did check the "Strongly Agree" category. It is also noteworthy that four students changed their responses from "Strongly Disagree" to "Disagree". In comparison, the Control Group's responses to the same question registered no change between the pre-test and the post-test.

Referring to Tan's explanation of a before and after experiment (Tan 9-56), the random assignment of subjects to groups will make them equal on the before-measure of the dependent variable, and outside influences on the dependent variable occurring between the before and after measures, should also be equal. Thus, any difference between the after-measure in the Treatment Group responses should be attributed to the independent variable.

All things being equal, the small shift in perceptions toward the Army can be attributed to the advertisement. The advertisement was the only difference between the two groups. The absence of any shift in the Control Group's responses must be attributed to the recruitment advertisement (independent variable).

While the null hypothesis must be accepted for lack of statistical significance, the positive shift in attitudes must not be discounted. One student out of thirty three changing his or her response to "Strongly Agree" is a convincing indicator that recruitment advertisements can have a powerful influence over certain members of the target group.

Hypothesis Two. *Army recruitment advertising is most effective on high school seniors between the ages of 17 and 21, who report they are average students.*

The data regarding reported academic performance and the effectiveness of Army recruitment advertising accept the null hypothesis. There were no correlation coefficients of significance between an affinity towards the Army and the reported academic achievement at the .05 level of significance.

While not statistically significant, it is interesting to note that the subject who changed his response to "Strongly Agree" on the post-test reported being a "B-C" student. This is not the only evidence to suggest that subjects who report being "average" students have an affinity towards the Army. The only two other members of the Treatment Group who agreed with the statement "I am considering joining the Army" also reported being "average" students. From the Control Group, the two subjects who agreed with this statement also reported being "average" students. Clearly, while academic performance may not be an indicator of a subject's receptiveness to recruitment advertising, the data appears to suggest a greater willingness to join the Army among students with average academic backgrounds.

Hypothesis Three. *Army recruitment advertising is most effective on individuals within the target group who have similar television viewing preferences.*

The data regarding television viewing preferences and the effectiveness of Army recruitment advertising accept the null hypothesis. There were no correlation coefficients of significance between television viewing preferences and affinity toward the Army at the .05 level of significance.

There were several types of television programming preferences that did prove to be statistically significant above the .01 level of significance. These included Sports Programming which had a correlation coefficient of .2744, Music TV .2698, Nighttime Drama .2533, and Talk/Interview Programming had a coefficient of .2173. These correlation coefficients suggest that subjects who noted an affinity toward Army service preferred these types of programs. This information can be useful to recruiters when determining which programs to target for recruitment advertising.

Hypothesis Four. *Army recruitment advertising is most effective on high school seniors of similar lower class economic backgrounds.*

The data regarding advertisement effectiveness and economic background accept the null hypothesis. There were no correlation coefficients of significance at the .05 level of significance. The correlation coefficients ranged from negative .0965 to a positive .0711. These coefficients translate to very little correlation between the dependent and independent variable. Apparently, economic background had little to do with a subject's receptiveness toward recruitment advertising or Army service.

Hypothesis Five. *Individuals within the target group who do not have clearly defined post-graduation plans (college or employment) will be more readily influenced by recruitment advertising.*

The data involving post-graduation plans, a concern about the future, and attitudes toward the Army accept the null hypothesis. There were no correlation coefficients of significance between these variables at the .05 level of significance. For the statement "I am planning on attending college after graduation," the correlation coefficient was negative .4548. Although not statistically significant, this coefficient value would indicate a strong negative relationship between students who plan to attend college and an affinity toward enlisting in the Army.

There does appear to be some relationship between seniors who have not decided to attend college and their attitudes toward Army enlistment. Seniors who answered "Strongly Agree" or "Agree" with the statement "I am considering joining the Army", stated they did not have college plans. This would indicate that recruitment advertising could be effective on high school seniors who are not planning to attend college.

NON-HYPOTHESES FINDINGS

A particularly significant finding in this experiment was the data indicating the U.S. Army and Ford Motor Company advertising slogans had a very high recognition among experiment participants. Question 15 of the questionnaire was designed to measure how well participants recognized the Army's recruitment slogan "Be All That You Can Be." Question 16 was designed to measure how well Ford's slogan was recognized and to raise the possibility in participants' minds that the experiment was set up to measure the effectiveness of Ford's advertising.

Pre-test results (before exposure to the video presentation) from both groups revealed that all 66 participants correctly identified the slogan "Be All That You Can Be" as the Army's recruitment slogan. Pre-test results to Question 16 revealed that 53 of 66

participants correctly identified the slogan "Quality is Job 1" as Ford's advertising slogan.

Calculations for correlation coefficients are defined so that "r" will always assume a value from minus one to plus one. A value where "r" equals minus one will occur when the sample points lie exactly in a straight line sloping down to the right, indicating a negative correlation. If the points lie in a straight line sloping up to the right, "r" equals a positive one and the correlation is positive. In a sample where "r" equals zero or is close to zero the linear relationship is said to be weak or nonexistent. Taking this into account, correlation coefficients on television viewing preferences and an affinity toward the Army suggest that advertising during certain types of programming should be avoided.

When a correlation analysis was conducted between television viewing preference responses and responses to questions 4, 6, 9 and 13, an "r" value of minus .2324 was recorded for news programming. Although not statistically significant, this coefficient value does suggest participants who demonstrated an affinity toward Army service do not often watch news programs. Negative values of "r" were also noted for Daytime Drama programs (-.2878), Talk/Interview Shows (-.2477), and Nighttime Dramas (-.2501). Table 5-1 summarizes the results of the correlation analysis.

Table 5-1

Dependent Variable	Army
20. Daytime Drama (Soap Operas)	-.2787
24. Nighttime Drama	-.2501
21. Talk/Interview Shows	-.2417
23. News Programs	-.2324

Significance Level .05.

The negative values of “r” for these types of programs are statistically significant above the .01 level, indicating students who have a neutral to positive attitude toward Army service do not watch these types of programming. Knowing which programs high school seniors dislike is as important as knowing which type of programs they prefer, especially when determining advertisement placement.

Conclusions and Recommendations

The findings of this experiment indicated that a small percentage of high school seniors in the Huntington area are affected by Army recruitment advertisements. The data suggested that recruitment advertisements were most effective on experiment participants who considered themselves “average” students and did not have post-graduation college plans. The research results indicated that these types of students had clearly defined television viewing preferences. As a result, the experiment results indicating the type of programming disliked by these participants will be significant to Army recruiting and advertising specialists.

Additional research in this area will help better define the group of seniors who are most receptive to Army recruitment advertising. Replication would also determine the most suitable types of programming to target for advertising efforts.

The lack of statistical significance in this experiment's results may be avoided in future experiments by increasing the population size. A stratified random sample could also reduce the risk of a higher female-to-male ratio in the Treatment Group. The significantly lower percentage of males in the Treatment Group might have contributed to the lack of statistical significance in the hypothesis testing.

Further research is needed to define the population of students who are receptive to Army recruitment advertising campaigns. Additional research into the viewing preferences of this population will help recruiters gain maximum advertising impact.

The data derived from this experiment suggest that when exposed to viewers who share specific traits, Army recruiting advertising can be instrumental in making a viewer more receptive to recruiting efforts. Although not statistically significant, results imply that male students who do not plan on attending college and who earn primarily Bs and Cs are more influenced by recruitment advertising. These data are supported by the fact that the only respondents who changed their answers in a positive direction after viewing the advertisement shared these traits.

One explanation for the receptiveness of these individuals may be explained in the Literature Review section of this theses. Perhaps the advertisement "U.S. Army Recon" contained the appropriate amount of peak visual experiences and emotional conceits for viewers who shared the a fore mentioned traits to connect the theme of the advertisement to themselves.

In particular, the individual who changed his response to "strongly agree" may have adopted the first four steps in the modeling process. First, this individual viewed the soldier in the ad engaging in a perceived noble activity. Second, he identified himself with the young man in the advertisement. That is, he realized that he was similar to the young soldier. Third, he appeared to recognize, consciously or unconsciously, that the behavior and activity viewed in the advertisement, if modeled, may bring about a positive outcome for himself. Fourth, when confronted on the post-test with Question 13, "I am considering joining the Army," on the post-test, he recalled the advertisement and changed his answer to "strongly agree."

Conversely, why didn't the advertisement have the same effect on the other participants in the experiment? Once again the answer lies in the information covered in the Literature Review. The other participants didn't respond to the emotional theme and the peak visual images because they did not relate to the message. That is, they did not perceive a connectedness between themselves and the dominant theme of the advertisement. In the modeling process these participants got only as far as the first step, "observe an individual engaging in a particular activity." They did not identify with the ad or realize, consciously or unconsciously, that if modeled, the activity would produce a desired outcome for themselves. So, when faced with question 13 on the post-test, they did not feel a need to change their answers.

The weakness of this study was that it did not go far enough in defining that segment of participants who would be most receptive to recruitment advertising. As mentioned previously, a stratified random sample that ensured that a greater number of

males were exposed to the treatment (U.S. Army Recon) might have produced significant results.

As demonstrated in this study, the effects of recruitment advertising can have profound effects on certain members of the viewing audience. The goal of future studies should be focused on better defining this target group. Future studies in this area should use a larger number of participants, a stratified random sample, a more defined questionnaire which focuses on defining academic performance and economics, and a follow-up questionnaire to be administered two to three months after the initial experiment. Determining the most receptive members of the viewing audience will be difficult, but this information will greatly increase the effectiveness of recruiters.

Appendix A

Survey Questionnaire (Pretest)

Please answer each question as truthfully as possible. The questions below are not intended to identify any individual and all answers will be kept strictly confidential.

Instructions. Please circle the response which best describes your views for each of the following statements.

1. Television programs provide a truthful representation of reality.

Strongly Agree Agree Neutral Disagree Strongly Disagree

2. I generally watch commercials that come on during my favorite programs.

Strongly Agree Agree Neutral Disagree Strongly Disagree

3. Most television advertising is believable.

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. The Army is a good place to mature.

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. The Ford Motor Company makes a good product.

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. The Army offers young adults a good alternative to college.

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. Ford makes the best cars and trucks.

Strongly Agree Agree Neutral Disagree Strongly Disagree

8. I prefer Fords over other makes of automobiles.

Strongly Agree Agree Neutral Disagree Strongly Disagree

9. The Army provides better opportunities to gain work experiences than other post graduation institutions (college, trade schools, etc.).

Strongly Agree Agree Neutral Disagree Strongly Disagree

10. I am planning on attending college after graduation.

Strongly Agree Agree Neutral Disagree Strongly Disagree

11. I am concerned about my future.

Strongly Agree Agree Neutral Disagree Strongly Disagree

12. I have chosen a career that I would like to pursue after graduation.

Strongly Agree Agree Neutral Disagree Strongly Disagree

13. I am considering joining the Army.

Strongly Agree Agree Neutral Disagree Strongly Disagree

14. I am considering buying a Ford.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Instructions. Please answer the following questions by placing an (x) beside the most correct answer. Select only one response per question.

15. Which organization uses the following statement in its advertising: "Be all that you can be"?

U.S. Air Force
 IBM
 Ford Motor Company
 AT&T
 Delta Airlines
 U.S. Army
 MCI

29. I am:

_____ 16 years old _____ 18 years old _____ 20 years old _____ other
_____ 17 years old _____ 19 years old _____ 21 years old

30. The number of working television in my home is: _____

31. I consider myself to be a:

_____ good student (A or A-B)
_____ above average student (B or B-C)
_____ average student (primarily C)
_____ below average student (Frequently below a C)

32. How many hours of television do you watch per day?

_____ less than 1 hour a day
_____ 1 to 2 hours a day
_____ 2 to 3 hours a day
_____ 3 to 4 hours a day
_____ 4 or more hours a day

Survey Questionnaire (Posttest)

Please answer each question as truthfully as possible. The questions below are not intended to identify any individual and all answers will be kept strictly confidential.

Instructions. Please circle the response which best describes your views for each of the following statements.

1. Television programs provide a truthful representation of reality.

Strongly Agree Agree Neutral Disagree Strongly Disagree

2. I generally watch commercials that come on during my favorite programs.

Strongly Agree Agree Neutral Disagree Strongly Disagree

3. Most television advertising is believable.

Strongly Agree Agree Neutral Disagree Strongly Disagree

4. The Army is a good place to mature.

Strongly Agree Agree Neutral Disagree Strongly Disagree

5. The Ford Motor Company makes a good product.

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. The Army offers young adults a good alternative to college.

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. Ford makes the best cars and trucks.

Strongly Agree Agree Neutral Disagree Strongly Disagree

8. I prefer Fords over other makes of automobiles.

Strongly Agree Agree Neutral Disagree Strongly Disagree

9. The Army provides better opportunities to gain work experiences than other post graduation institutions (college, trade schools, etc.).

Strongly Agree Agree Neutral Disagree Strongly Disagree

10. I am planning on attending college after graduation.

Strongly Agree Agree Neutral Disagree Strongly Disagree

11. I am concerned about my future.

Strongly Agree Agree Neutral Disagree Strongly Disagree

12. I have chosen a career that I would like to pursue after graduation.

Strongly Agree Agree Neutral Disagree Strongly Disagree

13. I am considering joining the Army.

Strongly Agree Agree Neutral Disagree Strongly Disagree

14. I am considering buying a Ford.

Strongly Agree Agree Neutral Disagree Strongly Disagree

Instructions. Please answer the following questions by placing an (x) beside the most correct answer. Select only one response per question.

15. Which organization uses the following statement in its advertising: "Be all that you can be"?

U.S. Air Force
 IBM
 Ford Motor Company
 AT&T
 Delta Airlines
 U.S. Army
 MCI

29. I am:

_____ 16 years old _____ 18 years old _____ 20 years old _____ other
_____ 17 years old _____ 19 years old _____ 21 years old

30. The number of working television in my home is: _____

31. I consider myself to be a:

_____ good student (A or A-B)
_____ above average student (B or B-C)
_____ average student (primarily C)
_____ below average student (Frequently below a C)

32. How many hours of television do you watch per day?

_____ less than 1 hour a day
_____ 1 to 2 hours a day
_____ 2 to 3 hours a day
_____ 3 to 4 hours a day
_____ 4 or more hours a day

APPENDIX B

Introduction and Instructions to Students

Good morning/afternoon, I am Jeffrey Dean, and this is my research assistant (name). We're graduate students at Marshall University. Your principal and your teachers have agreed to let us come here today to conduct a research experiment. This experiment will involve you answering questions from a short survey, watching a 28minute video, and answering questions from another survey.

But, before we begin the experiment we need to separate you into two groups. (Name) is going to be coming around with a bag. In the bag there are clear marbles and white marbles. What we want you to do is to reach into the bag and grab one marble. After everyone has grabbed a marble we will let you know in which group you belong. One of the groups will stay here with (name) and the other group will come with me to another classroom.

The surveys we are asking you to fill-in are pretty much self explanatory. But, if you have any questions, please feel free to ask (name) or myself. The information on the surveys will be used for research purposes only and all information will be kept strictly confidential. When you receive the first survey, you'll notice that it doesn't ask for your name or any other information that could be used to identify you. That's because we want you to fill out the surveys as truthfully as possible. It is also important that we get your response to the questions and not your neighbors. So please, don't discuss the questions or the video with anyone until the experiment is over.

After the first survey, we're going to show you a Louie Anderson comedy video. When the video is over we are going to give you another survey to fill in. Please take as much time and effort on the second survey as you did with the first. Like the first survey, all information will be kept strictly confidential. When everyone has finished the final survey, we will bring you all back together and explain what the experiment is all about.

This experiment can not be successfully completed without your help and I want to thank you in advance for your participation.

Introduction

When beginning, I would like to thank you for taking the time to participate in this experiment. The purpose of this experiment is to investigate the effects of [faded text] on [faded text].

Procedure

At the beginning of the experiment, you will be asked to complete a series of questionnaires. The first part of the experiment will involve [faded text] and the second part will involve [faded text]. You will be asked to perform a series of tasks that will require you to use your [faded text] skills. The results of the experiment will be analyzed and the findings will be reported in a final report. Your participation is greatly appreciated and we hope you will find the experiment interesting and informative.

Thank you

The results of the experiment will be analyzed and the findings will be reported in a final report. Your participation is greatly appreciated and we hope you will find the experiment interesting and informative. The first part of the experiment will involve [faded text] and the second part will involve [faded text]. You will be asked to perform a series of tasks that will require you to use your [faded text] skills. The results of the experiment will be analyzed and the findings will be reported in a final report. Your participation is greatly appreciated and we hope you will find the experiment interesting and informative.

The first part of the experiment will involve [faded text] and the second part will involve [faded text]. You will be asked to perform a series of tasks that will require you to use your [faded text] skills. The results of the experiment will be analyzed and the findings will be reported in a final report. Your participation is greatly appreciated and we hope you will find the experiment interesting and informative.

Appendix C

Instructions to Testers

Introduction

Before beginning, I would like to thank everyone who is helping administer this test. Without your help I would not be able to accomplish the research necessary to complete my thesis.

Phase One

As explained to you in your training briefing, this is a four-phase research experiment. The first step will begin when all the students who are going to participate in the experiment enter the room. During this phase, students will be asked to grab a marble from a brown paper bag. After students have chosen a marble the researcher will place a clear and a white marble in the bag. The researcher will draw a marble from the bag and the color of the marble drawn will represent the treatment group. After the selection process has been completed, the treatment group will be moved to another classroom while the control group remains seated in the original room.

Phase Two

The second phase will consist of a pre-test containing four sections and 34 total questions. During this phase, you will administer the pre-test by handing a test marked "Survey One" on the top center of the first page and with a number one printed on the upper right-hand corner to each student. During this phase of the research you will need to explain to the students how each section of the test is to be completed. When explaining each section make sure that you do not lead the students or inject any of your own personal feelings or bias into your explanation. Leading student responses could invalidate the research.

The first section is a Likert Scale design, with statements preceding responses. Instruct the students to read each statement carefully and then to circle the response that

best reflects their views. If they still do not understand, you may explain again by referring to question number one. Read the question aloud, then read the responses telling the students that they should circle the response that most closely represents their own views.

In the second section of the test, students will be asked to read an advertising slogan and to place an "X" beside the name of the company that uses that slogan in its advertisements. If students do not understand the instructions, you may read question number 15, explaining that they are to place an "X" beside the company's name who they think uses the slogan highlighted in the question.

The third section is also a Likert Scale, but the format is slightly altered. In this section, students will be asked to choose a number from a scale that most closely corresponds to how much they watch the following type of television programs. If the students need further explanation you may read question 17, explaining that they should place the number one in the space provided if they always watch Music Television, a number two if they watch Music Television often and so forth down the scale.

The fourth section will be used to determine demographic information. Explain to the students that they are to place an "X" beside the response that most closely represents them. Questions number 32 through 34 will require them to evaluate themselves as students, determine the amount of television they watch per day and which income bracket they feel their family belongs in. If students have a concern about these three questions remind them that there are no wrong answers and to please answer the questions as best as they can.

When the pre-tests have been filled out and returned, attach them together with the large paper clip provided. You are now ready to begin phase three.

Phase Three

The third phase is a 28-minute video which contains two thirty-second commercials.

Give the students a chance to relax for a few minutes, but do not let students leave the room. If students ask to use the rest room, allow them to go, but urge them to hurry. The school has allocated a limited amount of time to complete the experiment. It is important that those who need to use the rest room do so before the video begins. Once the video begins students should not be permitted to leave the room unless it is an emergency. Make sure each student has an unobstructed view of the television. Also, make sure the volume is loud enough so all students can hear the program.

Once the video is over students may want to ask questions or make comments about the program or the commercials. Be friendly, but do not answer their questions or let the students talk among themselves. Remind students that they will have a chance to discuss the survey and the program when the experiment is over. Talking about the commercials could influence or bias student responses to the post-test and invalidate the research.

Phase Four

When the video is over you are ready to administer the post-test. Take the stack of surveys that are marked with a "1.b" on the top right corner of the first page. Make sure that each student gets one copy of the post-test and that everyone still has a sharpened pencil. The post-test is identical to the pre-test so no one should have questions about how to complete it. It won't take long before students realize that the pre-test and the post-test are identical. Remind students not to talk during the test and to take just as much time and consideration completing the post-test as they did with the pre-test. Once all post-tests have been returned attach them together with the large paper clip provided. The experiment is now complete and you are free to answer their questions.

Conclusion

Please remain in the classroom until you are notified that the other group has completed their tests and video. When both groups have completed the experiment, all

the students will be brought back together and a short explanation of the experiment will be provided.

1. *Journal of Applied Psychology*, 1942, 27, 27-30.

2. *Journal of Applied Psychology*, 1942, 27, 21-24.

3. *Journal of Applied Psychology*, 1942, 27, 25-28.

4. *Journal of Applied Psychology*, 1942, 27, 31-34.

5. *Journal of Applied Psychology*, 1942, 27, 35-38.

6. *Journal of Applied Psychology*, 1942, 27, 39-42.

7. *Journal of Applied Psychology*, 1942, 27, 43-46.

8. *Journal of Applied Psychology*, 1942, 27, 47-50.

9. *Journal of Applied Psychology*, 1942, 27, 51-54.

10. *Journal of Applied Psychology*, 1942, 27, 55-58.

11. *Journal of Applied Psychology*, 1942, 27, 59-62.

12. *Journal of Applied Psychology*, 1942, 27, 63-66.

13. *Journal of Applied Psychology*, 1942, 27, 67-70.

14. *Journal of Applied Psychology*, 1942, 27, 71-74.

15. *Journal of Applied Psychology*, 1942, 27, 75-78.

16. *Journal of Applied Psychology*, 1942, 27, 79-82.

17. *Journal of Applied Psychology*, 1942, 27, 83-86.

18. *Journal of Applied Psychology*, 1942, 27, 87-90.

19. *Journal of Applied Psychology*, 1942, 27, 91-94.

20. *Journal of Applied Psychology*, 1942, 27, 95-98.

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2. *Engineering Journal*, 1945, 28, 5-8.

3. *Engineering Journal*, 1945, 28, 9-12.

4. *Engineering Journal*, 1945, 28, 13-16.

5. *Engineering Journal*, 1945, 28, 17-20.

6. *Engineering Journal*, 1945, 28, 21-24.

7. *Engineering Journal*, 1945, 28, 25-28.

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