VALUES OF ARMY ROTC CADETS AS RELATED TO THEIR CHOICE OF BRANCH OF SERVICE

Ву

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PREFACE

The purpose of this study is to investigate the possibility of differentiating between the values of Army ROTC cadets at Oklahoma State University who elect to enter a combat arm and those who elect to enter a supporting arm. The research was carried out by testing a number of senior and junior cadets using the Allport-Vernon-Lindzey Study of Values test.

This study was undertaken because its author, a professional Army officer, is concerned with the problems of recruiting and maintaining a highly qualified officer corps in the United States Army. Hopefully the results of the study can be used as a first step in the development of psychological instruments suitable for counseling of ROTC cadets.

Sincere gratitude is expressed to Dr. Donald Denum who acted as faculty advisor and thesis advisor to the author. Dr. Denum's interest and concern in the many problems that arose throughout the year greatly facilitated the accomplishment of this study.

A great deal of credit and thanks is also due my wife, Billie T.

Nadal, who did much "beyond the call of duty" to help her husband.

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CHAPTER I

INTRODUCTION

The military forces of our nation face a serious problem in the recruitment and retention of properly qualified personnel. With the growing complexity of our military weaponry the magnitude of this problem increases yearly. One aspect of this problem is the proper utilization of the available manpower. Proper utilization of manpower includes placing the individual in a job that complements his need and value system. If this were done within the Armed Services a more satisfied work force would ensue, and one would expect a resultant increase in retention of personnel.

At the present time there are established procedures whereby enlisted men entering the Army are assigned to Military Occupational Specialties based on their performance on a battery of aptitude tests. This procedure, however, is not followed with incoming officers, partially because an officer's job even within a given branch is so diversified over a twenty or thirty year career that it would be difficult to relate it to specific aptitudes. One possible solution to this problem is to determine if officer candidates entering different branches of the Army differ along some attribute more basic than that measured by generalized aptitude tests. The main purpose of this study is to investigate this possibility by studying the values of ROTC cadets at Oklahoma State University.

There is also another facet of the Army to which the study is relevant. A number of authors (Janowitz, 1960, 1964, 1965; Lang, 1964; Coates and Pellegrin, 1966) have written about a dichotomy in the armed services between the need to maintain the traditional military values and the need to change in order to take full advantage of the latest technology. Janowitz (1960) refers to this conflict as occurring between those with heroic and managerial orientation, but does not deal in detail with the basis for these orientations. He implies that they are caused by the technological requirements of the different branches or arms of service. It is possible, however, that these differences are more basic than Janowitz believes. They may be a result of the different values with which individuals enter the Army. If so, they would tend to remain relatively constant throughout his career and would be an important factor in the dichotomy mentioned above (Huntley, 1965; Gunderson and Nelson, 1966). If it can be shown that different values are related to different branch choices, this will shed some light on the causes of the conflict described by Janowitz.

Need for the Study

The problem of retention of qualified personnel in the Army is most severe in the case of present college graduates. Though the Reserve Officers Training Corps program is the largest source of Army officers, the retention of the highly qualified officer that is needed has been poor (Kotula and Haggerty, 1966). The problem of officer retention is not only one of quantity but also one of quality. As Kurt Lang points out, those officers with the technical degrees now required in the Army are the ones who most often resign (Janowitz, 1964, p. 52). There are,

of course, many reasons for this, including financial rewards outside the service. Though in time of war the various officer candidate schools throughout the Army turn out second lieutenants in large numbers, the leadership of the Army comes from the educated and qualified college graduate commissioned either from the United States Military Academy or through the ROTC program. If the quality of the Army officer corps is to be maintained then all steps possible must be taken to insure that more of the officers the Army needs elect to remain on active duty.

Realizing the importance of this problem the Army, through its

Personnel Research Office, has undertaken the task of developing a

battery of tests titled the <u>Differential Officer Battery</u>, designed to

answer the following question (Willemin, 1964, p. 1).

Assuming that officers differ in their potential for responsibility in different fields of Army activity, how successfully can these differing potentials be predicted by psychological measures suitable for operational use?

Hopefully the successful development of this battery of tests will enable the Army to assist the incoming officer in selecting the branch in which he will be most satisfied, thereby increasing the probability of his desiring to remain in the Army. The development of the <u>Differential</u> Officer Battery includes both interest and aptitude tests.

This thesis represents a limited approach to the problem of branch selection, being concerned primarily with the study of the value systems of ROTC cadets at Oklahoma State University as related to their choice of branch of service in the Army. Ideally the results of this study will reveal a pattern of values representative of individuals who elect to enter the combat or supporting arms which could be used locally to assist in the guidance of the ROTC cadets. Little research has been done in regard to the values of Army officers and no data is available

relating values to arms of service. The available research is mentioned in the next chapter.

Statement of the Problem

Numerous studies (Fores, 1953; Gunderson and Mahan, 1966; Gunderson and Nelson, 1966; Miller, 1962; etc.) have established that occupational choice is partially a function of the individual's values. A few studies have dealt with values of Armed Forces personnel (mainly in the Air Force and Navy) but these have generally failed to differentiate between occupational groups within each service. One series of studies by Gunderson and Nelson (1966), in which the authors used thirty-one personality and value scales including the Allport-Vernon-Lindzey Study of Values, did examine values of Navy enlisted men and found significant differences in different occupational groups. This has not been done for officers. Those psychologists who have studied the values of Armed Service personnel have dealt with officers as an entity. There are, however, large differences within each service, as well as among services, in what an officer does. The most basic difference in the Army is between those who engage in direct combat with the enemy (normally Infantry, Artillery, and Armor) and those who do not. It seems reasonable to assume that this difference in occupation, between fighters and nonfighters, should be great enough to attract people with different values.

The purpose of this study is to determine the relationship between values, as measured by the Allport-Vernon-Lindzey Study of Values and the branch choice of cadets in the ROTC program. The specific areas of investigation are the relationship between values and selection of combat or non-combat arms in the senior and junior classes and the similarity

or differences across classes for the combat and non-combat groups.

Statistical analysis of the data will be conducted to determine if differences among the various sub-groups are significant.

Limitations of the Study

This study is limited to students in the ROTC program at Oklahoma State University during the Spring semester of 1967. In order to be able to generalize from the results obtained two assumptions are necessary. These are:

- 1) The values of those cadets selecting combat arms and those selecting non-combat arms are constant throughout four years of college, relative to each other. Changes in values that do take place will not affect the relative standing of one group when compared with the other. This has been shown to be so when dealing with groups formed on the basis of a student's college major (Duffy, 1940; Huntley, 1965).
- 2) The branch choice stated by the junior cadets was a sincere and realistic statement of the branch they intend to choose. This question did not arise with the seniors because they had already made their official selection, and this official choice was used to categorize them as combat or non-combat.

There are obviously factors other than the values considered in this study which influence an individual's career choice. Parental influence and the ROTC instructors are examples of influences which have a bearing on this study. This study does not deal with these factors. The decision to measure only certain values was made because they are considered basic and can be measured using a number of standardized

tests. Other factors are treated as random variables for purposes of this study.

CHAPTER II

REVIEW OF THE LITERATURE

In this chapter a review of the literature relative to tests of values and their applicability to vocational choices is conducted.

Specific studies have been selected which show the relevance of values to occupational choice in college students, the consistency of these values while in college, and values related to different aspects of the military profession. As mentioned earlier there appear to be no studies relating values to different occupations within the Army officer corps.

Before commencing a review of the literature dealing with the specific problem of this thesis it is essential that we define what is being measured. Allport, one of the authors of the test to be used, says of values (1961, p. 454):

We know a person best if we know what kind of future he is trying to bring about -- and his molding of the future rests primarily on his personal values. A value is a belief upon which a man acts by preference. It is thus a cognitive, a motor, and, above all a deeply propriate disposition.

Super and Crites state that the traits measured by the Allport-Vernon-Lindzey Study of Values (1962, p. 492):

.... resemble interests but are more basic, for they concern the valuation of all types of activities and goals, and they seem in some instances to be more closely related to needs or drives.

The relation of values to military service is best summarized in a study by Weybrew and Molish (1959) which deals with motivation of officer candidates for the submarine service. The authors state (p. 11):

The investigation of motivation for the submarine service from the standpoint of one's system of values seems especially fruitful. When one identifies successfully with a group it is evident that the values of the particular group run closely parallel to his own. Loyalty to any group depends on this basic doctrine. It would seem that when this orientation is applied to a group of submarine officers a dual group identification is involved. First identification with the value system of general Naval service is involved and choosing the Navy as a career.

Secondly the goals and objectives of the submarine service must be looked upon by the successful submariner as fulfilling and being constant with his own basic values.

The direct applicability of the above statement to this study is obvious.

The decision to enter the submarine service is similar to that made to enter a combat arm in the Army.

The values dealt with in this study (those measured by the Allport-Vernon-Lindzey Study of Values) are based on Edward Spranger's sixfold classification of ideal values (1928). Referring to Spranger's typology, Allport (1961) states that:

If a personality is fairly well integrated, if there is consistency among its regions, then in principle very few diagnostic techniques need to be used. One and the same personality should shine through all methods.

The question of whether Spranger's typology is valid is immaterial to this study. The point of fact is that the <u>Study of Values</u> does measure some constant attribute and that this attribute has been found to differentiate among various occupational groups. For the purpose of this study values will be operationally defined as the scores obtained on the six categories of the <u>Study of Values</u>. These six categories are described by the authors of the test as follows (Allport, Vernon, Lindzey, 1960, pp. 4-5):

(1) The Theoretical. The dominant interest of the theoretical man is the discovery of truth. In the pursuit of this goal he characteristically takes a "cognitive" attitude, one that looks for identities and differences; one that divests itself of judgements regarding the beauty or utility of objects, and seeks only

to observe and to reason. Since the interests of the theoretical man are empirical, critical, and rational, he is necessarily an intellectualist, frequently a scientist or philosopher. His chief aim in life is to order and systematize his knowledge.

(2) The Economic. The economic man is characteristically interested in what is useful. Based originally upon the satisfaction of bodily needs (self-preservation), the interest in utilities develops to embrace the practical affairs of the business world -- the production, marketing, and consumption of goods, the elaboration of credit, and the accumulation of tangible wealth. This type is thoroughly "practical" and conforms well to the prevailing stereotype of the average American businessman.

The economic attitude frequently comes into conflict with other values. The economic man wants education to be practical, and regards unapplied knowledge as waste. Great feats of engineering and application result from the demands economic men make upon science. The value of utility likewise conflicts with the aesthetic value, except when art serves commercial ends. In his personal life the economic man is likely to confuse luxury with beauty. In his relations with people he is more likely to be interested in surpassing them in wealth than in dominating them (political attitude) or in serving them (social attitude). In some cases the economic man may be said to make his religion the worship of Mammon. In other instances, however, he may have high regard for the traditional God, but inclines to consider Him as the giver of good gifts, of wealth, prosperity, and other tangible blessings.

- (3) The Aesthetic. The aesthetic man sees his highest value in form and harmony. Each single experience is judged from the standpoint of grace, symmetry, or fitness. He regards life as a procession of events; each single impression is enjoyed for its own sake. He need not be a creative artist, nor need he be effete; he is aesthetic if he but finds his chief interest in the artistic episodes of life.
- (4) The Social. The highest value for this type is love of people. In the Study of Values it is the altruistic or philanthropic aspect of love that is measured. The social man prizes other persons as ends, and is therefore himself kind, sympathetic, and unselfish. He is likely to find the theoretical, economic, and aesthetic attitudes cold and inhuman. In contrast to the political type, the social man regards love as itself the only suitable form of human relationship. Spranger adds that in its purest form the social interest is selfless and tends to approach very closely to the religious attitude.
- (5) The Political. The political man is interested primarily in power. His activities are not necessarily within the narrow field of politics; but whatever his vocation, he betrays himself as a Machtmensch. Leaders in any field generally have high power value. Since competition and struggle play a large part in all life, many philosophers have seen power as the most universal and most

fundamental of motives. There are, however, certain personalities in whom the desire for a direct expression of this motive is uppermost, who wish above all else for personal power, influence, and renown.

(6) The Religious. The highest value of the religious man may be called unity. He is mystical, and seeks to comprehend the cosmos as a whole, to relate himself to its embracing totality. Spranger defines the religious man as one "whose mental structure is permanently directed to the creation of the highest and absolutely satisfying value experience". Some men of this type are "immanent mystics", that is, they find their religious experience in the affirmation of life and in active participation therein. A Faust with his zest and enthusiasm sees something divine in every event. The "transcendental mystic", on the other hand, seeks to unite himself with a higher reality by withdrawing from life; he is the ascetic, and, like the holy men of India, finds the experience of unity through self-denial and meditation. In many individuals the negation and affirmation of life alternate to yield the greatest satisfaction.

Values of College Students

One of the two principal reasons the <u>Study of Values</u> was selected as the measurement instrument was its extensive use with college students. The test was designed primarily to be used with college students and it has been standardized on a college population (AVL <u>Study of Values</u>, 1960). The fact that the population was over representative of eastern colleges (Goodwin, 1964) is not important to this study as this study is concerned only with differences between groups at Oklahoma State University.

Of direct relevance to this thesis is that the <u>Study of Values</u> has been able to differentiate among a large number of occupational groups as represented by the college majors of testees in a large number of universities. The manual for the test lists norms for engineering, business, medical, education, and theological students (AVL <u>Study of Values</u>, 1960). These norms, however, represent major occupational differences and as such are probably of a greater magnitude than the

differences we can expect to find between combat and non-combat groups in the Army. A study reported by Karn (1952) does deal with differences which are similar to what might be expected between the combat and non-combat groups. Karn reports significant differences (P=.05) in values, as measured by the <u>Study of Values</u>, among students specializing in different engineering fields such as electrical, mechanical, and chemical engineering. He further states that these differences may reflect a basic motivational difference in the type of person who enters a certain branch of engineering.

This relationship between values and occupational choice is not surprising. There is a fair amount of literature dealing with the process of selecting an occupation, and most of it appears to agree with a study by Fores (1953) in which he arrives at the conclusions that (1) Choice of vocation is not primarily a rational or logical but a somewhat blind, emotional and automatic process, (2) The primary reasons for selecting a vocation are unconscious, (3) Occupational choice is an expression of basic personality organization and can and should satisfy basic needs, and (4) Selection of a vocation is a personal choice, a culmination of the individual's unique psychological development.

Simpson and Simpson (1960), based on their research at two universities, state that people who enter different occupations have basically different outlooks on life and that values and occupational choice are systematically interrelated.

Of particular importance to this thesis are studies dealing with the constancy of the six values we are measuring over a four year college education. Harris (1934), Schaeffer (1936), and Whitley (1958) all

Values remain fairly constant throughout the student's college career.

There is a slight tendency for theoretical values to increase but this was not significant. Huntley (1965), in the latest and most thorough investigation of this point, conducted a longitudinal study of 1,027 undergraduates during their four years in college. His conclusions are that individual values, as measured by the Study of Values, do change but that the changes in values are constant within different cultural groups or college majors. He reports data for nine different groups, these being Humanities, Social Studies, Science, Pre Medical (Art), Pre Medical (Science), Chemistry, Physics, Industrial Administration, and Engineering. The author concludes:

This is to say, then, that the pattern of values for each group tends to remain almost the same over the four years, when each group is compared with the others within the population studied (Huntley, 1965, p. 381).

The result of four years in college was generally to accentuate differences that existed when the individuals entered college.

These results are significant because they support the hypothesis that the values of the ROTC cadets relative to their status as a member of the combat arms or non-combat arms group will remain constant over the four years of college. As mentioned earlier this hypothesis is necessary if the study is to have any predictive significance.

Values of Occupational Groups

In addition to having been used extensively with college students
the <u>Study of Values</u> has been found useful in measuring value differences
between professional groups during their careers. This is important
because it shows that the differences measured in college carry over

into the actual occupations. The manual for the <u>Study of Values</u> reports norms for Air Force officers, businessmen, teachers, public administrators, personnel and guidance workers, scoutmasters, and clergymen. In this regard Super and Crites (1962) state that though more occupational norms are desirable there is enough research evidence to lend support to the practice of interpreting AVL scores in vocational terms.

The pattern of these values is what one would expect. Engineers score high on the theoretical values, clergymen on the religious value, and art students on the aesthetic value. Values of Air Force officers will be discussed in detail in the section dealing with values in the Armed Services.

A study that deals with the values of managers as a group instead of by occupational field is of interest because it reflects on an occupational specialty which is similar to the duties of an Army officer. Rychlak (1963) analyzed values as related to leadership and stated that it is wrong to conclude that no consistencies have emerged from objective studies in leadership that deal with the personalities of leaders. Based on six tests of personality and intellectual ability he found that leaders are typified by dominance and aggression needs, an achievement orientation, and good mental and scholastic ability. Though the definition of leader used by Rychlak (84 lower level management personnel) would tend to fit any officer in the Army regardless of branch his description of the leader's personality will be of interest in the next section when compared with the personality characteristics of the fighter.

Values in the Armed Services

As mentioned earlier a limited amount of studies are available dealing with the values of Armed Services personnel. Though the majority of these investigations were conducted under the auspices of the Navy or Air Force they do serve to establish a pattern of values for officers as a whole and point to the feasibility of discriminating between military occupational choice on the basis of values.

Most of the studies available have used the <u>Study of Values</u> as one of their measuring instruments. Some of these studies have been briefly mentioned already but the specific data obtained has not been discussed. In order to provide an insight into the values scores one might expect, these studies will be analyzed in greater detail at this time.

The first of these is the study by Weybrew and Molish (1959). Their data indicates that the volunteers for the submarine service have significantly higher value scores on the theoretical and political scales and lower scores on the aesthetic and social scales than a college population who do not volunteer for this type of service. Guba and Getzels (1956) reported a somewhat different pattern of values in a test of Air Force officers (N=213). They found significantly higher scores on the economic, religious, and political scales and lower aesthetic and social values when compared with male college students. This differs somewhat from the norms for Air Force officers (N=61) reported in the Manual for the Study of Values (1960, p. 14) in which the theoretical, economic, and political values were greater than the norm for college students. Though the manual does not report if the differences are significant the political value for the Air Force officers was higher than that of any other of the seventeen occupations tested.

A study by Gunderson and Mahan (1966) studied differences between nine Navy occupational groups. Included in these nine groups was a category for officers. The <u>Study of Values</u> was found to differentiate at the .01 level between the nine groups. In this case the pattern for the officers showed the highest score on the theoretical scale, closely followed by the political scale. The officers studied in this case were not typical Naval officers, but officer-scientists involved in Antarctic research. This probably accounts for their higher theoretical score.

The dominant value orientations of the officers on these studies is the political one. This is followed by the theoretical scale on most studies. There is a tendency for low scores on the aesthetic and social values. The results obtained by testing the ROTC cadets can be expected to follow the same pattern with the major difference between combat and non-combat arms groups being a higher score on the political scale for the combat arms groups.

The reason for the higher scores on the political scale is evident when one considers the relationship between the duties of a combat arms officer and his values. A study by Olive (1964) found that values were related to the way an individual perceives an occupation. Referring to the earlier quote taken from the study by Weybrew and Molish (1959), the individual's perception of the job must be in accord with his value systems. There is little about an infantry career that is attractive except the opportunity for power and leadership. It is assumed, therefore, that people selecting the combat arms would be oriented towards a desire for power and for interpersonal relations to a greater degree than those electing a non-combat arms.

A study by Seegelman and Peck (1960) in which the authors compare

personality models of officers, chemists, and ministers supports this view. The authors state (p. 344):

The personality model of the military officer included the suggestion that the need to lead and organize men assertively would be strong. The reaction of the officer to the personal interview reflected the inclination to firmly direct and train people, and thus supported the hypothesis. The assumption was made that associations with subordinates, peers, and superiors, and close personal relationships in general, were sought and valued......The concern for loyalty and honesty with men was also brought out in the interview.

Though this description is supposed to apply to officers as a group it should be more relevant to the combat arms groups because leadership is more personal and direct in the combat arms.

Tagiuri (1965) relates leadership to values by pointing out that most leaders have a high power orientation and that the political scale of the <u>Study of Values</u> in effect measures power orientation. The Rychlak study, as previously mentioned, also relates leadership to power.

Indirectly related to the study of values but having a bearing on this thesis is the question of the differences between fighters and nonfighters. This is included in this review of the literature because these studies provide insight into some of the psychological factors that may be present in a cadet who chooses a combat arm. Though the question of combat effectiveness is not directly relevant to this thesis it seems a fair assumption that cadets volunteering for the combat arms should be more like fighters than those who do not choose a combat arm. The esprit and performance of volunteer units in the Armed Services certainly is an indication that a homogeneity of values exist among people who volunteer for hazardous service. As mentioned earlier common values is one important aspect of successful identification with a group.

The most recent study dealing with differences between effective and non-effective combat soldiers was conducted by the Human Resources Research Organization for the Department of the Army from 1952 to 1954 (Egbert, Cline, Meeland; 1954). In this study the authors selected 354 subjects from 647 interviewed, half of whom were outstanding fighters and half of whom were non-fighters (combat ineffective). These soldiers were given an extensive test battery lasting one week. A number of relevant factors were identified as significant in identifying the effective fighters. Among these were education (the effective fighter was better educated), time in the Army, and certain personality differences. The psychological tests found 28 items that were significant. These items were then reduced to five major differences between fighters and non-fighters. These are (Egbert, Cline, Meeland; 1954, p. 8):

- 1) The fighter exhibits a high degree of social responsibility and is more tolerant.
- 2) The fighter is more intelligent and is better able to use his intelligence effectively.
- 3) The fighter has more leadership potential.
- 4) The fighter possesses more masculine toughness. He is less feminine and less emotionally sensitive.
- 5) The fighter has better emotional stability and better personal adjustment.

It should be recognized that this was the first study of a series and that the two groups used in this investigation were purposely selected to maximize their differences along the criteria of combat effectiveness. These differences would therefore be much harder to account for in a random sample of soldiers.

It appears that, to a degree at least, the general personality attributes of a fighter are similar to those of a leader, as discussed

by Tagiuri and Rychlak and to the model described by Siegelman and Peck. In terms of the <u>Study of Values</u> it is believed "leadership potential" and "social responsibility" might be reflected by higher scores on the political scale. As Coffin has stated (1944, p. 67):

The interest in power, command, and management which presumably is important to organizational activity is clearly the basis of Spranger's political interest.

Another way of looking at the differences between officers in the combat arms and supporting arms is on the basis of Janowitz's heroic versus managerial model. A study of West Point cadets by Lovell (1962) has attempted to do this. He states (Lovell, 1962, p. 130):

Our first hypothesis in this chapter is that branch of service preference, which is the one opportunity that the cadet has to delimit the role awaiting him in subsequent military service, is a function of the preferences which the cadet has for certain career rewards, demands, and opportunities.
....We are hypothesizing, in other words, that certain types of individuals are attracted to certain branches of service, because they perceive that these branches of service will provide the role

most in keeping with their own existing needs and preferences.

Cadets were asked to select career characteristics which they would consider important from a list devised to measure heroic or managerial orientations. The heroic answers include such phrases as "personal bravery" and "gentlemanly conduct", while the managerial answers included "tact in dealing with civilian leaders" and "managerial skill" (Lovell, 1962, p. 217). The results confirmed the stated hypothesis. By grouping Cadet branch selections into Infantry-Marine, Armor-Artillery, Engineer-Signal Corps, and Air Force, Lovell found that the questionnaire differentiated between these groups on the basis of the heroic-managerial orientations. The overall differences between groups was significant at the .01 level of probability. Applying the Wilcoxon match-pairs signed-rank tests the Infantry-Marine group was significantly

more heroic than the other three groups at the .01 level and the Armor-Artillery was more heroic than the Air Force group at the .05 level.

These results are relevant to this thesis, especially when considered in light of the conditions at West Point . First, students at West Point are a more homogeneous group in regard to their feeling toward Army service than the students at Oklahoma State University.

Secondly, the traditions of the institution tend to reinforce, to a degree, the heroic aspects of the military career. Additionally, the branches available to the West Point cadet at the time Lovell's study was conducted were limited to those comprising his various groupings. These did not include the large majority of the supporting arms which are available to the cadets at Oklahoma State University. The discrimination made by his study was therefore between groups, which would be found on the heroic end of the heroic-managerial continuum if all branches of the Army were considered.

On the other hand the differences envisioned by this study will be measured in a population with much greater variance in terms of their outlook on military service, and with a larger number of options in the branch of service they may select. If differences exist along the heroic-managerial dimension at West Point they should be measurable in terms of values at Oklahoma State University, because values are a more basic dimension than the heroic-managerial orientation and because we are dealing with a more heterogeneous population.

Summary

The review of the literature has shown the following:

- 1. Values can be definitely associated with career choice.
- 2. The Allport-Vernon-Lindzey Study of Values (1960) differentiates among individuals majoring in different occupational areas in college and also among individuals in different professions.
- 3. The values measured by the <u>Study of Values</u> remain relatively constant over four years of college when comparing groups undertaking different courses of study against each other.
- 4. Individuals entering different branches of the Army have different orientations on a heroic versus managerial scale.
- 5. The general pattern of values for officers on the <u>Study of</u>

 <u>Values</u> shows high political and theoretical values and low social and aesthetic values.

Hypothesis

The major hypothesis of this study is that significant differences exist between the values of ROTC cadets who select a combat arm and those who do not. The following sub-hypotheses will be tested:

- 1. Values will differ significantly between the combat and noncombat groups in the senior class.
- 2. Values will differ significantly between the combat and noncombat groups in the junior class.
- 3. Differences in values will be less between the combat groups in junior and senior classes than between combat and non-combat groups in the same class.

4. Political values of the combat groups will be significantly higher than political values of the non-combat group.

CHAPTER III

METHOD AND PROCEDURE

The basic purpose of this investigation was to examine the value differences between Army ROTC cadets selecting to enter a combat arm and those selecting to enter the supporting arms. In order to do this the Allport-Vernon-Lindzey Study of Values was used. As already mentioned this test measures six values, Theoretical, Economic, Aesthetic, Social, Political, and Religious. The extensive use of this test with collegiate groups and the availability of norms for various type occupations led to its selection for use in this thesis. Its use by the Navy and Air Force provided some valuable norms for service personnel.

The test manual, in describing the test, states (Manual, <u>Study of</u> Values, 1960, p. 3):

The test consists of a number of questions, based upon a variety of familiar situations to which two alternative answers in Part I and four alternative answers in Part II are provided. In all there are 120 answers, 20 of which refer to each of the six values.

It further states (Manual, Study of Values, 1960, p. 8):

Unlike many tests of personality, the present scale aims to measure more than a single variable. It does not, however, measure the absolute strength of each of the six values, but only their relative strength.

A high score on one value can be obtained only by reducing correspondingly the scores on one or more of the other values. In interpreting the results, therefore, it is necessary to bear in mind that they reveal only the relative importance of each of the six values in a given personality, not the total amount of "value energy" or motivation possessed by an individual.

The ipsative nature of the scoring procedure is important because it limits to a degree the options available for statistical analysis since the different values are not independent of each other.

Reliability of the <u>Study of Values</u>, as obtained by the split-half method and the Spearman-Brown product moment technique, seems quite satisfactory. The mean reliability coefficient, using a **Z** transformation technique is .90. Reliability data for the <u>Study of Values</u> are shown in Table I.

TABLE I

RELIABILITY DATA FOR THE STUDY OF VALUES
(N=100)

V a 1 ue	Correlations
Theoretical	.84
Economic	.93
Aesthetic	.89
Social	.90
Political	.87
Religious	•97

(From Manual for the Study of Values, 1960, p. 9)

Studies dealing with retest reliability, determined for two different populations, one after an interval of one month and one after an interval of two months resulted in mean reliability coefficients of .89 for the one month study and .88 for the two month study.

The question of the validity of the <u>Study of Values</u> is not adequately covered in the manual provided with the test, however the

available literature that deals with the test or its usage indicates that the test is sufficiently valid. John Hundleby, writing in The
Sixth Mental Measurements Yearbook, first states that the theoretical basis of the test, i.e., Spranger's values, have to be researched further but that (Buros, 1965):

This is not to say that the <u>Study of Values</u> lacks validity in the realms of values and interests, for there is considerable supportive evidence on the usefulness of the test in a variety of settings - particularly counseling and selection.

The manual states that perhaps the most direct and convincing evidence for the validity of the test comes from examining the scores of groups whose characteristics are known (1960, p. 13). As mentioned earlier, the authors list norms for various occupations or college majors which show that different groups score as one would expect. This is, of course, an attempt to establish concurrent validity. There is also a study that indicates predictive validity by showing that the test given in college is highly predictive of occupational careers followed by college students five to fifteen years after graduation (Mawardi, 1952).

Administration

Due to limitations on the amount of interference with normal classes allowed by the Army ROTC, it was necessary to issue the test booklets to the cadets and allow them to complete them at their residences. Instructions were given to each instructor of a senior or junior class (Appendix A) which were read to the cadets. The instructors were given a general briefing as to the purpose of the study but were instructed to say nothing about the study other than read the instructions and answer administrative questions. A cover sheet was

attached to each test booklet in which the cadet was asked to write his name, choice of branch, college major and branch he would have chosen a year earlier (Appendices B and C).

Though this method of administering the test is not as satisfactory as one in which more detailed supervision is exercised it was the only system available. Part 2 of the test manual, "Instructions for Administering" specifically makes the point that it is not absolutely necessary to give verbal instructions to persons taking the test and that the test may be taken "at home". The <u>Study of Values</u> is considered by the test authors as a self-administering test.

Population

The population of this study consisted of the junior and senior classes of Army ROTC at Oklahoma State University. Consideration was given to selecting cadets from all four classes but it was felt that the freshmen and sophomores would not have sufficient knowledge of the Army or of the functions of the various services to be able to make an intelligent choice. Between the sophomore and junior years the cadets attend a six week summer camp which serves to show them some of the unpleasant realities of combat arms service, and which can better qualify them in making an informed choice.

Within the population the junior class members to be tested were selected at random. Due to the small size of the senior class (N=102), however, it was necessary to test the entire class in order to have an adequate sample size. Of the 102 tests issued 89 were returned properly completed and were used. Of these 34 were categorized as combat and 55 were non-combat.

The junior class was much larger (N=258) than the seniors, and had not yet made a choice as to desired branch of service. As mentioned above the sample from this class was randomly selected. It was necessary first to determine the branches cadets desired to enter. This was done by the ROTC instructors. The results showed almost an even split between combat and non-combat arms. A random sample of 40 cadets was then chosen from each group, combat and non-combat. Of these 38 combat tests and 33 non-combat tests were usable.

Total sample size therefore was 160 cadets, 89 seniors and 71 juniors.

Statistical Procedure

Partially because of the ipsative scoring of the test, but mainly because this study deals with the differences that exist among the combat and non-combat groups in each of the six values, statistical analysis was limited to a series of \underline{t} tests. As will be seen in more detail in the next chapter the mean for each value of each of the four groups was compared with the corresponding mean value of the other three groups. The purpose of this procedure was to determine in which specific values significant differences existed both within a class and across the two classes and to determine if there were greater differences across classes but within the same combat classification than across the combat classification but within a class. A total of $36\ \underline{t}$ tests were made in order to match each value against all other groups.

CHAPTER IV

RESULTS

Introduction

The results of this investigation are reported by comparing combat and non-combat groups within each class, by comparing similar groups across classes, and lastly by comparing dissimilar groups across classes.

It is felt that the results of this study generally support the hypothesis stated in Chapter II. Some of the differences between groups were not as great as expected and some unexpected differences were found. It is obvious however that significant differences in values exist between those cadets selecting a combat arm and those selecting a supporting arm. Table II summarizes the results of the thirty-six comparisons of mean value scores showing only those \underline{t} values that were significant at the .05 or .10 level. Tables IV through IX show the results of comparisons of the six values for the various groups.

As noted in the hypothesis the expected results were that the different groups would have significantly different values, but, except for the political value there was not enough information in the available literature to attempt to predict how the values would differ. A prediction was made, however, that the political value of the combat arms groups would be significantly higher than that of the non-combat groups. For this reason the level of significance of the \underline{t} ratio for the political value was in every case determined by a one tail test. The other

values were compared by a two tail <u>t</u> test. Therefore in Table II and Tables IV through IX the political value comparisons are a one tail test while the other values are two tail tests.

Before considering the specific values it would be worthwhile to consider Table III which is extracted from an article by William L. Goodwin (1964) in which the author has converted the norms given in the test manual into percentile scores. This table will allow the reader to compare the values of the cadets at Oklahoma State University with those of the male collegiate population established as the norm by the test authors. This is of interest because it shows that even though the difference in the means of certain values may not be great a few points can make a large difference in percentile rank. As noted earlier the norms reported in the test manual are over representative of eastern colleges so comparisons may not be valid in terms of making inferences about strengths of values when compared with the national norms.

Analysis of Senior Class Scores

The first values to be examined in detail are those of the senior class. The comparison to be made is between the combat arms and non-combat arms groups. Table IV shows the scores obtained by the seniors.

Table IV shows that the political and aesthetic values were significantly different in the comparison of the two senior class groups.

As predicted the political value was significantly higher for the combat than the non-combat group.

Comparing the political value of the combat arms seniors with the norms described in Table III shows that on this value these cadets scored almost at the eightieth percentile. The non-combat arms seniors

TABLE II SUMMARY OF SIGNIFICANT VALUE MEANS

Groups	**************************************	T	E	Α	S	P	R ·
Combat Seniors N=34	Mean SD			32.58 6.85		47.88 7.09	
Non-Combat Seniors N=55	Mean SD			36.37 8.47		45.22 6.87	
	t			2.30**		1.77**	
Combat Seniors N=34	Mean SD		43.79 7.61				
Combat Juniors N=38	Mean SD		47.45 9.15				
	t		2.06**				
Combat Seniors N=34	Mean SD				31.88 7.70	47.88 7.09	
Non-Combat Juniors N=33	Mean SD				35.09 8.31	44.45 8.24	
	t	-			1.76*	1.82**	
Non-Combat Seniors N=55	Mean SD			36.37 8.47			38.16 9.52
Non-Combat Juniors N=33	Mean SD			² 9.97 8.08			42.30 7.90
	t			5.02**			2.07**
Combat Juniors N=38	Mean SD				31.71 5.37	48.97 8.78	38.36 8.91
Non-Combat Juniors N=33	Mean SD				35.09 7.22	44.45 8.24	42.30 7.90
	t		•		2.25**	2.22**	1.95*
Combat Juniors N=38	Mean SD		47.45 9.15	31.21 6.95		48.97 8.78	
Non-Combat Seniors N=55	Mean SD		43.33 8.32	36.37 8.47		45.22 6.87	
	t		2.68**	3.21**		2.21**	

T = Theoretical; E = Economic; A = Aesthetic; S = Social; P = Political; R = Religious. Political values are compared using one tail test.
*P\Relambde .1
**P\Relambde .05

TABLE III

CENTILE SHEET FOR COLLEGE MEN ON ALLPORT-VERNON-LINDZEY
STUDY OF VALUES

%i 1e	Т	E	Α	S	Р	R
						:
99	60-62	60-63	54 - 56	53 - 55	58-60	59-62
97	58	58	<i>5</i> 1	50	55	56
95	55-56	<i>55-5</i> 6	48-49	48-49	53 - 54	53-54
90	53	53	46	46	52	50
85	51	51	44	44	50	47-48
80 -	50	₄₉	42	₄₃	- - 4 8 -	46 _
75	49	48	41	42	47	45
70	48	47	39	41	46	43
65	47	46	38	40	46	42
60	46	45	38	3 9	45	41
55	45	44	36	38	44	39
50	44	43	35	37	43	38
45	43	42	34	36	42	37
40	42	41	33	35	41	35
35	41	40	32	34	40	34
30	40	39	31	33	39	33
25	3 9	37	29	32	38	32
20	38	36	28	31	37	31
15	36	35	$\frac{1}{27}$		36	$\frac{31}{29}$
10	34	32	24	28	34	26
5	32	30	21-22	26	32	23-24
5 · 3	30	28	19	24	<u>3</u> 0	20 - 21
1	25-27	23-25	14-16	19-21	26-28	1 <i>5-</i> 17

T = Theoretical; E = Economic; A = Aesthetic; S = Social P = Political; R = Religious

(From "Adjustment for Sex and Variability Differences on the Allport-Vernon-Lindzey Study of Values Profiles", by William L. Goodwin, Journal of Educational Measurement, 1964, 1, 55-58.)

scored just below the sixtieth percentile.

TABLE IV

VALUES MEAN SCORES FOR SENIORS

Scale	Combat Means N=34	Non-Combat Means N=55	<u>t</u>
Theoretical	42.50	43.65	.79
Economic	43.79	43.33	. 27
Aesthetic	32.58	36.37	2.30**
Social	31.88	33.16	.75
Political	47.88	45.22	1.77**
Religious	41.23	38.16	1.49

*P≦.1

**P≦.05

The most important consideration when discussing the political value is that in every case, as will be seen in the following comparisons, this value was greater for the combat arms than for the non-combat arms, and was always significant at some probability less than .05 when considering a one tail test.

In this particular case the aesthetic value resulted in the most significant differences between the combat and non-combat groups. This value, however, was not a consistent discriminator between combat and non-combat groups as it was significant in only two of the four comparisons made between combat groups of the junior and senior class and the non-combat groups. The lack of a consistent difference between combat and non-combat groups on this particular value was somewhat

surprising as the aesthetic value is almost diametrically opposed to the political one.

When the respective scores of both senior class groups on the aesthetic value are compared with the percentile scores (Table III) it can be seen that, though the value of \underline{t} is significant, the difference in percentile score is very small. In this case the combat group scored in the thirty-fifth percentile while the non-combat group scored just over the fortieth percentile.

Other value differences were not significant.

The size of the standard deviation for the values of both groups were rather constant across all values and of the same order of magnitude as that reported in the test manual for Air Force officers or in the studies done by the Navy. For the combat groups the standard deviation varied from a high of 9.35 for the religious value to 6.13 for the theoretical value. In the non-combat group the largest standard deviation was 9.51 for the religious value and the smallest was 6.87 for the political value.

Analysis of Junior Class Scores

Table V shows the mean values of the combat and non-combat juniors and the respective t value.

As noted in Table V three values were significant for the junior class; social, political, and religious. Again the political value was significantly higher for the combat group than for the non-combat group. In this case however the level of significance of the difference between the two groups was higher than for the senior class. Considering a one tail test the value of t was significant in this case at the .025 point.

Referring to Table III we see that percentile scores were very similar on the political scale to those of the senior class.

TABLE V
VALUES MEAN SCORES FOR JUNIORS

Scale	Combat Means N=34	Non-Combat Means N=55	t.
Theoretical	41.84	41.58	.20
Economic	47.45	46.18	.67
Aesthetic	31.21	29.97	.69
Social	31.71	35.09	2.25**
Political	48.97	44.45	2.22**
Religious	38.36	42.30	1.95*

*P≦.1

**P≦.05

The religious value was significant for this comparison at the .10 level (two tail). This is the only case in which this value was significant when comparing a combat versus a non-combat group. However, the mean of 38.36 for the combat group is very close to the fiftieth percentile. Generally the available literature dealing with the <u>Study of Values</u> and military men shows that military personnel do not vary greatly from the norm in the religious value. The non-combat group scored just above the sixty-fifth percentile in this case.

The last significant difference in the junior class is the social value, and it is the most significant difference shown. The combat arms group, with a score of 31.71, is slightly above the twentieth percentile,

whereas the non-combat group's 35.09 places them in the fortieth percentile. The question of the social value is an interesting one and will be discussed in more detail in the next chapter.

The size of the standard deviations were of the same order of magnitude as for the senior class and in agreement with those normally obtained when using the <u>Study of Values</u>. For the combat group the standard deviation varied from 5.38 for the social value to 8.92 for the religious value. The non-combat group varied from 4.79 for the theoretical value to 9.08 for the economic value.

Summarizing the interclass comparison we see first of all that the hypothesis regarding the political value held true but that the other significant differences were not consistent for the two classes. The social value, though not significant in both cases, was consistent in that it was always less for the combat groups than for the non-combat groups. Also of interest is the homogeneity of the classes in the theoretical and economic values. The difference within either class in these two values was very slight. This is important because, as Goodwin (1964) indicates, these two values in addition to the political value normally comprise the "male" values (those in which males normally have high scores). Since we are dealing with a population all of which volunteered for ROTC we would expect close similarity in values that emphasize those qualities in which the groups are similar. The theoretical and economic values show this to be true.

The fact that differences in values were not greater than those obtained is to be expected because we are dealing with a rather small vocational difference, that is, choice of branch within a service.

Analysis of Combat Groups Across Classes

The purpose of analyzing the combat and non-combat groups across classes is to determine whether the homogeneity of the combat groups is greater than the homogeneity of the respective class. In order to facilitate the comparison Tables VI and VII show the results of the \underline{t} tests. The values shown on these tables for the different classifications are, of course, the same as shown earlier in Tables IV and V.

TABLE VI

VALUES MEAN SCORES FOR COMBAT GROUPS

Scale	Senior Means N=34	Junior Means N=38	<u>t</u>
Theoretical	42.50	41.84	. 44
Economic	43.79	47.45	2.06**
Aesthetic	32.58	31.21	. 84
Social	31.88	31.71	.11
Political	47.88	48.97	.51
Religious	41.23	38.36	1.32

**P≦.05

Only one value was significantly different between the combat groups of both classes. The difference in the economic value was significant at the .05 level of probability. This is an unexpected difference and reveals—that on this value the classes are more homogeneous than the combat groups. This can be seen best when one considers the rather large difference between the scores of the seniors and the juniors, but the small differences within the classes, on this score.

This one score notwithstanding these two combat groups are more homogeneous than any other two groups compared. In all other cases at least two values were significantly different. This homogeneity was to be expected, because these are the most similar groups being considered. All four groups chose to participate in Army ROTC, but these two groups in addition chose a combat arm. The choosing of a combat arm is a more conscious step, and narrows the group more, than the rejection of a combat arms. Those cadets who chose to enter a supporting arm have a large number of branches from which to choose, most of which have little in common. The cadets who choose a combat arm have only three choices as defined by this study -- infantry, armor, and artillery -- all of which have in common a requirement for direct engagement with the enemy.

As expected there was no difference in the political value of these two combat groups, and in both cases it was the highest value recorded for each group. Within the combat group then, the political value can be considered the predominant one.

Analysis of Non-Combat Groups Across Classes

The comparison of values of the non-combat groups is shown in Table VII.

The main point of interest when studying these non-combat groups is that these groups are less homogeneous than the combat groups that were previously compared, and that there were no significant differences in the political value.

Ideally, in order to maximize the difference between combat and non-combat groups, there should have been no differences between these two non-combat groups. Though significant differences existed, including

a very small probability of \underline{t} for the aesthetic value, there was no consistency in these differences when compared with any pattern established by other comparisons.

TABLE VII

VALUES MEAN SCORES FOR NON-COMBAT GROUPS
(two tail test)

Scale	Senior Means N=34	Junior Means N=38	<u>t</u>
Theoretical	43.65	41.58	1.57
Economic	43.33	46.18	1.47
Aesthetic	36.37	29.97	5.01**
Socia1	33.16	35.09	1.18
Political	45.22	44.45	.76
Religious	38.16	42.30	2.07**

**P≦.05

Analysis Across Groups and Across Classes

The last two comparisons to be considered are those across groups and classes, that is combat seniors against non-combat juniors and vice versa. Theoretically these comparisons should show the greatest discrepancies since we are adding the difference caused by the classes to the difference caused by the choice of branch.

The values shown in Tables VIII and IX are the same as have been seen in the previous tables. They are repeated, paired according to the comparison being made in order to facilitate reference to the comparison being discussed.

TABLE VIII

VALUES MEAN SCORES FOR COMBAT SENIORS AND NON-COMBAT JUNIORS

Scale	Combat Senior Means N=34	Non-Combat Junior Means N=33	<u>t</u>
The aretice 1	42.50	41.58	-
Theoretical	42.50	41.50	• 59
Economic	43.79	46.18	1.16
Aesthetic	32.58	29.97	1.42
Social	31.88	35.09	1.76*
Political	47.88	44.45	1.82**
Religious	41.23	42.30	. 50

%P≦. 1

**P≦.05

Though the values presented in Table VIII show that there were significant differences in two values the differences were not as great as might be expected. As mentioned earlier the social and political values are the two in which the relationship between combat and non-combat groups held for all comparisons.

Table IX shows the relationship between the combat juniors and the non-combat seniors.

Unlike the comparison between the combat seniors and non-combat juniors this one yields very significant differences in three values; political, economic, and aesthetic. Again the political value is significant in the correction direction. The difference in these three values, all at a probability level less than .05 indicate that of all the comparisons made these are the least homogeneous groups. It should

also be noted that differences in the social value, though not sifnificant, are in the expected direction.

TABLE IX

VALUES MEAN SCORES FOR COMBAT JUNIORS AND NON-COMBAT SENIORS (two tail test)

Scale	Combat Junior Means N=38	Non-Combat Senior Means N=55		
			<u>t</u>	
Theoretical	41.84	43.65	1.22	
Economic	47.45	43.33	2.68**	
Aesthetic	31.21	36.37	3.21**	
Social	31.71	33.16	1.05	
Political	48.97	45.22	2.21**	
Re1igious	38.36	38.16	•11	

%P≦.10

**P≦.05

Summary

The data obtained in this study reveals only two constant patterns.

These are:

- 1) The political value of the combat group is in every case significantly higher than the non-combat groups.
- 2) The social value of the combat group is in every case lower than the non-combat groups, though this is not always statistically significant.

In addition it can also be stated that the two combat groups are

the most homogeneous of any of the groups compared. These results are consistent with what the review of the literature might have led us to believe.

CHAPTER V

CONCLUSIONS

There is a mounting accumulation of research literature dealing with personality differences among occupational groupsAvailable published research on occupational personality patterns provides many promising hypotheses, but as yet few differences have been conclusively established (Anastasi, 1964, p. 460).

Unfortunately this study must be counted as one that adds to the accumulation of research literature mentioned above. It does not conclusively establish that a difference exists between the combat and non-combat groups because to do so would necessitate further replications. This study does however indicate that there is certainly cause to believe that certain value differences exist between the two groups and that these differences can be accounted for on the basis of the prior research done in the area of occupational personality patterns.

In reviewing the study the major finding was that the political value of the <u>Study of Values</u> was consistently significantly higher for the combat than the non-combat group. This is in agreement with what had been hypothesized in Chapter II, and with the available literature. The study by Rychlak (1963) established that leaders have a high power orientation, and it is felt that the choice of a combat career is an indication of a choice within the armed services for better access to power and leadership opportunity. The studies by Weybrew and Molish (1959), Guba and Getzels (1956), and that reported in the manual all show that military officers, as a group, have a high power orientation.

When one differentiates among military officers, it seems logical that those involved in combat operations, which after all is the basic military duty, would be more oriented towards the one value that seemed specifically significant to the military. This conclusion was borne out by this study.

As mentioned earlier the social value was also a consistent predictor though not always significantly so. The social value is important because it is felt that one of the differences between those who choose the combat arms and those who do not should be an interest in people. This is, after all, one way of looking at the occupational differences between the two groups. Leadership in the combat arms is much more direct and emotional than it is in a non-combat arm. Particularly in the infantry, but also in the other combat arms, the officers' function is to motivate and lead men. In the non-combat arms the officer functions more as a manager, leading, but also coordinating the effort of men and machines to deliver supplies to a certain place at a certain time. The emotional component of asking or telling men to risk their lives is not present.

This view is supported by the HUMRRO study reported earlier which found that one of the key differences between fighters and non-effective fighters was a sense of social responsibility (Egbert, Cline, Meeland, 1954). Social responsibility was defined in the report as the willingness to take care of and charge of others. The study by Seegelman and Peck (1960) which describes the personality model of an officer by stating that close personal relationships in general were sought and valued also supports the view that social values are important in the armed services.

It is interesting to note that one of the factors that managers have in common, in those studies that have measured their values, is a low social score. This is so whether the study deals with civilian or military occupations. This seems to be something of a paradox. It is well established that one of the essential attributes of a leader is concern for the welfare of his subordinates. In the Armed Forces one of the two main tenets of officership is "Take Care of Your Men," and it is generally recognized that most of the successful officers do this to a large degree. The answer to this paradox lies in the term social value as defined by Spranger. The altruistic and philanthropic aspect of love that is measured by the social scale is different from the more practical but equally sincere regard for one's compatriots essential to good officership.

It is believed that the two values mentioned above, that is, the political value and the social value, provide sufficient evidence to justify further investigation into the development of precise personality instruments that could be used to differentiate between cadets who should be counseled to enter either combat or non-combat arms.

Limitations

As in any study of this type there are certain limitations which affect the validity of the conclusions reached. The first of these is that the study is limited to Oklahoma State University. It may be that different factors influence students at other universities which are not present at this institution. Secondly, in order to be able to state conclusively that the political value is significantly higher for those cadets who choose the combat arms it is necessary that the study be

cross-validated on a new sample. This is especially important in this study as the observed differences between groups were not very great.

It is also important to realize that the differences found represent group trends. Within these groups there was a wide amount of individual variance. Since this study dealt with occupational choice, and not occupational performance, it has yet to be established which scores in the general group pattern observed are indicative of a successful future career.

Recommendations

This study is considered by its author as a preliminary investigation to determine the feasibility of differentiating between potential combat and non-combat arms officers on the basis of personality tests. The results indicate the feasibility of this and therefore additional studies should be undertaken. These should start by replicating this study at Oklahoma State University and other universities. In addition to using the <u>Study of Values</u> additional tests should be used in order to be able to select only those items which maximally differentiate between groups, and thereby develop a more precise measuring instrument.

In addition, base rates for successful combat and non-combat arms officers should be established from a population of highly successful officers. This would enable us to see if the individual's occupational concepts are in accord with the value structure required for success.

Studies of the type listed above should result in instruments specifically designed to assist in pre-commissioning counseling of ROTC cadets and thereby lead to better utilization of human resources within the United States Army.

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APPENDIXES

APPENDIX A

INSTRUCTIONS FOR CADETS

Please read these instructions prior to issuing test booklets.

"You are being asked to participate in a study being conducted by Major Ramon Nadal, a graduate student at the University, by completing this test booklet, A Study of Values, and the attached cover sheet.

The test is self explanatory. Please note that in Part I the highest preference does not always come first in the series of two items. Whenever alternative B is preferred the higher score will appear second in the series of two boxes.

In Part II the highest value judgement -- your first choice -- is given a score of 4, the lowest a score of 1.

Do not collaborate with others when answering the questions.

Put your name on the test booklet as well as on the cover sheet.

Return to me at our next class period. 11

APPENDIX B

SENIORS

Personal Information

NAME (print)Last Name	First Name	MI
CLASS	COLLEGE MAJOR	
What branch of the Army did you reque	est?	
What branch did you receive?		
At this time last year what branch we	ere you planning to re	equest?
Do you plan to volunteer for Airborne	e, Ranger, or Aviation	training?
If so, which one?		

Please complete information above and the attached booklet -
Study of Values -- and return to your ROTC instructor at your next

class period. Please put your name on the cover of the test booklet.

It is not necessary that you grade the Study of Values.

APPENDIX C

JUNIORS

Personal Information

NAME (print)Last Name	First Name	MI
CLASS	COLLEGE MAJOR	
What branch of the Army do you plan	to request?	<u> </u>
At this time last year which branch	were your most inte	rested in?

Please complete information above and the attached booklet -
<u>Study of Values</u> -- and return to your ROTC instructor at your next

class period. Please put your name on the cover of the test booklet.

It is not necessary that you grade the <u>Study of Values</u>.

Ramon Antonio Nadal

Candidate for the Degree of

Master of Science

Thesis: VALUES OF ARMY ROTC CADETS AS RELATED TO THEIR CHOICE OF BRANCH OF SERVICE

Major Field: Psychology

Biographical:

Personal Data: Born at Fort Benning, Georgia, December 27, 1935, the son of Capt. Ramon A. and Minita G. Nadal.

Education: Attended grade school in Puerto Rico and Fort Leavenworth, Kansas; graduated from high school at the Peddie School, Hightstown, New Jersey, in June, 1953; attended Sullivan Preparatory School in Washington, D. C. finishing in May, 1954; received the Bachelor of Science degree from the United States Military Academy in 1958; graduated from Basic Infantry Officers Course in December, 1958; graduated from the Armor Officers Career Course in June, 1965; completed requirements for the Master of Science degree in July, 1967.

Professional Experience: Commissioned as a second lieutenant in 1958. Attended Airborne, Ranger, and Pathfinder courses. Served in Germany from 1959 to 1962 as a platoon leader and company executive officer. Served with the 7th Special Forces from 1962 to 1964, including a tour of duty in Vietnam. Served with the 1st Air Cavalry Division, again in Vietnam, as a company commander and battalion operations officer. Awarded the Silver Star, Soldier's Medal, Bronze Star, Air Medal, Purple Heart, and Vietnamese Cross of Gallantry. Is now a major of Infantry.