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## ABSTRACT

The responses of USMA graduates from the Class of 1950 are compared with those of graduates from civilian colleges on a number of topics of current interest. Most of the topics dealt with many of the goals of education which are obtainable and observable only in adult life. The questionnaire that was used consisted of seven major sections: background information, activities, changing society, viewpoints, educational benefits, memory of college experiences, and personal traits. The respondents to the mailed questionnaire were divided into five groups: uSmA graduates still on active duty; USMA graduates not on active duty; the total number of USMA graduates responding; graduates from eight civilian engineering and science schools; and graduates from 74 civilian colleges and universities. In general, it appears that the osma graduate compares favorably, if not more favorably, with graduates from civilian colleges and universities on most of the topics analyzed. It is noted that the typical USMA graduate feels that he has benefited more by going to college than does the graduate from a civilian institution of higher education. It is cautioned that any interpretations of these results must be made in conjunction with the goals, philosophies, values, and beliefs of USMA and the other colleges, since they may vary from institution to institution. (Author/LBH)

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## COMPARISON OF

USDA GRADUATES
FROM THE CLASS OF 1950
WITH GRADUATES FROM OTHER COLLEGES
ON SELECTED VARIABLES .
(A Product Appraisal Report)

## OFFICE OF

INSTITUTIONAL RESEARCH

# COMPARISON OF USMA GRADUATES FROM THE CLASS OF 1950 WITH GRadUATES FROM OTHER COLLEGES ON SELECTED VARIABLES 

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Report Prepared By: Dr. Richard P. Butler

November 1971

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NOTE: Any conclusions in this report are not to be construed as official U.S. Military Academy or Department of the Army positions unless so designated by other authorized documents.
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[^1]The USMA Product Appraisal Project was initiated in 1961 in order to assess the success of the Military Academy in preparing its graduates for a military career. This assessment of college impact, or educational "accountability," is one of the central themes in educational research today. The methodological problems associated with measuring educational impact are many and varied. The current state-of-the-art dictates that such research concern itself more with the consequences of higher education rather than its objectives, and the investigative style is necessarily exploratory in nature. A thorough assessment of the USMA as an institution would be a mammoth undertaking requiring many years of investigation by a large research staff. In fact, at one time (1965) a task force of eight personnel and a budget of over $\$ 576,000$ was envisioned for this purpose at West Point. However, for budgetary and other reasons this plan was never implemented. Consequently, Product Appraisal research was virtually dormant from 1965 until June 1970 when a researcher was made available for that project on a full-time basis. Although several reports have been produced during the past year, this one is unique in that comparative data are available from a large number of other institutions.

The reader interested in a summary of the methodological problems associated with the evaluation of educational impact is referred to the short monograph published by the College Entrance Examination Board: Accountability in Higher Education by Rodney T. Hartnett of the Educational Testing Service (1971).

Colonel Gerald W. Medsger
Director of Institutional Research

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## ABSTRACT

The purpose of this study was to compare the responses of USMA graduates from the Class of 1950 with those of graduates from civilian colleges on a number of topics of current interest. Most of the topics dealt with many of the goals of education which are obtainable and observable only in adult life. Thr questionnaire that was used to gather data on these goals of education and other information consisted of the following seven major sections: background information, activities, changing society, viewpoints, educational benefits, memory of college experiences, and personal traits. The respondents to the mailed questionnaire were divided into five groups: USMA graduates still on active duty; USMA graduates not on active duty; the total number of USMA graduates who responded to the questionnaire; graduates from eight civilian engineering and science schools; and graduates from 74 civilian colleges and universities. Analysis of the results shows that although the groups have very similar response patterns to some items, their responses on other items were of ten markedly distinct. Generally speaking, it appears that the USMA graduate compares favorably, if not more favorably, with graduates from civilian colleges and universities on most of the topics that were analyzed. It is especially noteworthy to report the finding that the typical USMA graduate feels that he has benefited more by going to college than does the graduate from a civilian institution of higher education. It is cautioned that any interpretations of these results must be made in conjunction with the goals, philosophies, values, and beliefs of USMA and the other colleges, since they may vary from institution to institution.

## INTRODUCTION

One of the aims of the Product Appraisal Project, which was established by General William C. Westmoreland in 1961, is to survey periodically United States Military Academy (USMA) graduates on questions pertaining to their school experiences, current activities, and attitudes toward various issues of rurrent interest. The purpose of the present study is intended to fulfill partially this aim by surveying USMA graduates from the Class of 1950 and then comparing their responses with those of graduates from other colleges and universities from the Class of 1950 in regard to some background information, activities, awareness and attitudes toward the changing society, viewpoints, educational benefits, memories of college experiences, and personal traits. As such, this study deals with many of the long range goals of education which are obtainable and observable only in adult life; and that it is therefore useful and relevant to be concerned about activities, opinions, and judgments of USMA's alumni.

## METHOD

## Subjects

The subjects consisted of 5981 male graduates of 75 colleges and universities from the Class of 1950. Of this total, 330 were USMA graduates, and 5651 were graduated from schools other than USMA. For the USMA sample, the respondents were divided into three groups: those graduates who were still on active duty (USMA $A D$ ); those not on active duty (USMA NAD); and the total number of USMA graduates who responded to the questionnaire, including the first two groups and also those respondents who could not be classified as either on active duty or not on active duty because of a clerical difficulty* (USMA Total).

For the USMA tetal group, 567 questionnaires were mailed, and the 330 usable returns represented a response rate of about 60 percent. For the other two USMA groups it is impossible to determine the exact response rates because a proportion of each, in all probability, was included in the USMA total group but could not be separated out as either on active duty or not on active duty because of the clerical difficulty. The $N$ of 39 for the not on active duty group is relatively quite small, and it is possible that some sampling bias may be present in its responses. At the time the questionnaires were sent, there were approximately 160 graduates from the Class of 1950 who were no longer on active duty and whose addresses were available. The 39 respondents who could be classified as not on active duty thus represent around 25 percent of this group. It must also be noted that respondents not on active duty have left the profession for which their Military Academy education had prepared them. A comparative group of civilian college graduates who switched occupations is not available. Therefore, conclusions drawn from the not on active

[^2]duty group should be made with extreme caution.
For the graduates of the 74 civilian colleges and universities involved in the present study, a total of 9,411 questionnaires were mailed, and the 5651 usable returns represent a response rate of 60 percent. For purposes of analysis, the respondents from the civilian institutions were divided into two groups: graduates from eight engineering and science schools (engineering and science), and the total number of graduates from the 74 civilian schools combined (national norm).

Questionnaire
Data for this study were gathered by means of a questionnaire (see Appendix A) developed at the Research and Development Center (Center for the Study and Evaluation) at UCLA. Dr. C. Robert Pace, Professor of Higher Education, had the major responsibility in preparing the questionnaire. The survey questionnaire consisted of eight major parts, seven of which were used for the present report. A brief description of each of these seven parts follows:

1. Background or Personal Information--this section includes census-1ike questions dealing with personal and family background--economic, political, religious, satisfaction with college choice, and level of education.
2. The Activity Scales--measure interest and involvement in important areas of life--community affairs, national and state politics, international and intercultural affairs, art, music, drama, literature, religion, and science. These scales are based on the assumption that the extent to which people engage in certain kinds of activities is a reflection of their interests, values, satisfactions, and commitments. The question that these scales attempt to answer is: "To what extent have college graduates developed an interest and involvement in certain areas of content and experience relevant to some of the objectives of higher education?" The items in each of the scales include some that are commonplace, easy-to-do activities and others that require more effort and thus imply a deeper or more intense level of interest and involvement. Because the items form this kind of pattern, the number of items checked in a scale provides a neaningful and reliable index of activity level. A person's score, then, is simply the number of activities he has checked.
3. The Changing Society--items from this part are intended to measure one's knowledge, awareness, and attitudes toward major trends that are thought to be occurring in American society. The items comprising these scales address themselves to trends in the areas of education, the labor market, economy, government planning, general societal values, sociology and environment, and resources. The two major scales of this section are the Changing Society Occurring scale, which measures one's sensitivity to what some experts think are major trends in our society, and the Changing Society Desirable scale, which measures attitudes toward such actual or assumed changes. Items were drawn and adapted from a variety of writings by social analysts. The response "generally true" is regarded as the correct response to every item
for the Changing Society Occurring scale. Thus, an individual's score is the number of statements marked "generally true." The score for the Changing Society Desirable scale is the number of statements marked "generally desirable," with the exception of one item that is scored "generally undesirable" and another which is not scored.
4. Viewpoints--three scores are derived from various items in this section-the role of government, equal opportunities for women, and civil rights. The higher the scores the more the individual favors interdependence and friendship among all nations, fuller opportunities for women, and civil rights causes, respectively.
5. Educational Benefits--items comprising this section include many of the goals and values commonly sought in higher education. For the purpose of obtaining scores, the items were grouped into three categories--vocational benefits, personal and social benefits, and liberal arts benefits. A person's score on each of these groupings is simply the number of items he marked with the response "very much," indicating that he felt that he benefited very much from attending college on the item under investigation. In looking at the scores for these parts, one can see what objectives are judged to be most fully realized and whether the major benefits claimed are also the major benefits that are intended by the college.
6. Memories of College Experiences--this section of the questionnaire is actually a part of the School and College Experience division of the questionnaire. The intent of items in this section is to see what aspects of college experience stand out in one's memory. The two scores that are developed pertain to the extent to which peer relations and academic experiences "stand out" in the respondents' memories about their college experiences. The score is simply the number of items that were checked in each section.
7. Personal Traits--in this section of the questionnaire certain combinations of responses are totalled to provide an estimate of three personal traits that are, in combination, related to what one may broadly describe as intellectual disposition. For the first trait, called Autonomy, a high score indicates a general independence of traditional authority. The second trait, Complexity, describes an individual's tolerance for ambiguous situations and enjoyment in dealing with complex and novel ideas. Individuals possessing the third trait, Theoretical Orientation, usually have a preference for using the scientific method in thinking. They tend to be logical, analytical, and critical in their approach to problems. For all three traits the scores are simply the number of times a respondent answered in the keyed direction.

## Procedure

In the Spring of 1970 the Office of Institutional Research, USMA, in conjunction with the Association of Graduates, USMA, mailed the questionnaires to all USMA graduates from the Class of 1950 whose addresses were available. Data from the other 74 colleges and universities were obtained from the Research and Development Center at UCLA, which had mailed its questionnaires to a random sample of alumni (Class of 1950) in the Spring of 1969. The
selection of participating institutions, however, was not random and is not claimed to be representative of higher education in the United States. Rather, the institutions were selected as examples of various types or categories, so that the major kinds of institutional environments would be reflected. In all, eight categories of institutions were included:

1. Highly selective liberal arts colleges, private, non-sectarian.
2. Strongly denominational liberal arts colleges, Protestant and Catholic.
3. General liberal arts colleges, non-sectarian and moderately denominational.
4. Highly selective universities, public and private.
5. General comprehensive universities, public and private.
6. State colleges and other universities having less extensive graduate programs than comprehensive universities.
7. Colleges having a major emphasis on teacher education.
8. Colleges and universities having a major emphasis on engineering and sciences.

For purposes of the present report comparisons were made between the responses of the USMA graduates and those from institutions listed under category number 8 (engineering and science schools) and the national norm, which consists of the responses of every male respondent from every school except USMA. For the engineering and science schools the following eight institutions were included: California Institile of Technology, Lehigh University, Massachusetts Institute of Technology, Polytechnic Institute of Brooklyn, Purdue University, Rensselaer Polytechnic Institute, Rose Polytechnic Institute, and South Dakota Mines and Technology.

## Procedural Caution

As stated in the Introduction, the purpose of the present study was to survey USMA alumni on a series of topics and then to compare the results with the results obtained from graduates of other colleges and universities. Many of the questions asked pertained to some of the long term goals of a college education, such as the following: alumni who are active and informed citizens, participants and contributors to the cultural life of the community, widely read, abreast of changes, and exposed to new ideas and experiences. However, under the limitations of the design of the present study, it is impossible to ascertain if the scores obtained on the various questions were caused by the respondents' college education, a self-selection factor, pre- or post-college experiences, or by an interaction of these factors. But, given these limitations, it is still possible to take the "black box" approach and to report the results at their face value, without considering what the actual
causes of these results were. Essentially, this is the approach that will be taken in presenting the results of the present study. It must be kept in mind that any interpretations of the results of this study that a reader makes must be made in the light of a school's own philosophy, values, beliefs, and goals. This is so because different colleges often possess different goals; for example, for some colleges the extent to which alumni are active in church related areas is a relevant and important goal; but in some other colleges, church activity may be irrelevant and unimportant. Readers of this report are therefore cautioned not to extract results from this study without considering the goals of the colleges involved.

## RESULTS

The results of this study can be presented most efficiently by examining the responses to the items in each of the seven major questionnaire parts in turn. This procedure will be followed throughout this section. All the tables used to report the results can be found in Appendix B. Each table has breakouts on five groups: USMA AD, USMA NAD, USMA Total, Engineering and Science, and National Norm. The numbers inside of the lines are all percentages. When the sample size ( $N$ ), mean ( $\bar{X}$ ), and standard deviation (SD) are given the columns are so labeled. In analyzing the results from each table, only the highlights will be pointed out; and only those questions that have norm data from the UCLA sample will be reported on.

1. Background Information--the purpose of this section is to compare USMA graduates with graduates from other colleges and universities on a number of variables pertaining to background data. Each of the items comprising this section will be considpxed in turn.
a. Highest level of education attained--Table 1 indicates that a much larger percentage of USMA graduates than graduates from other schools have attained a master's degree. However, a smaller percentage of USMA graduates (3 and 4\%) than graduates from other colleges (7\%) have received a doctorate.
b. Present feeling about undergraduate college--as can be seen from Table 2 , very few graduates feel either thoroughly or generally negative about the college they graduated from. A large majority indicated that they are pleasantly nostalgic or have a strong attachment. For USMA Total this percentage was 92. Many more USMA graduates, percentage-wise, than graduates from other colleges, stated that they had a strong attachment to the college from which they received their bachelor's degree.
c. Satisfaction with college choice--data for Table 3 were gathered from the question: "If you could do it over again, would you go to the same undergraduate college?" A greater percentage of USMA graduates would definitely attend their same undergraduate college than would graduates from other colleges. Even about $80 \%$ of USMA graduates not on active duty would either definitely or probably attend USMA if they could do it over again. More extensive data on this and related questions can be found in a study by Bridges.*

[^3]d. Size of community of present residence--there is little noteworthy information in Table 4, except to indicate that typically the respondents tend to live in suburbs of metropolitan areas with populations of 500,000 to $2,000,000$, or in small towns of 50,000 people or less.
e. Current annuql income from all sources--Table 5 shows that almost no USMA graduate has an annual income of less than $\$ 10,000$, whercas $8 \%$ of the graduates in the national norm sample do. It is interesting to note that $83 \%$ of USMA graduates still on active duty reported that their income was between $\$ 15,000$ and $\$ 25,000$, as compared to $55 \%$ for engineering \& science graduates, and $45 \%$ for the national norm. However, fewer USMA AD graduates listed annual incomes of from $\$ 25,000-\$ 50,000$ than did graduates from other colleges. The group which appears to have the highest income is USMA NAD, with 53\% reporting incomes of $\$ 25,000$ or more.
f. Political party preference--Table 6 indicates that many more college graduates are Republicans than Democrats. The USMA NAD group is most heavily Republican, with $79 \%$ choosing this response. The USMA AD and USMA Total groups are more often non-partisan than are members of the other three groups, but a smaller percentage of USMA graduates listed the Democratic party.
g. Religious identification--only a small percentage of USMA graduates have either no formal religion or no definite religious beliefs (see Table 7). This percentage is slightly higher for graduates of civilian colleges. By far, the Protestant faiths are favored by most college graduates.
2. Activity Scales--results from each of the 11 different Activity Scales will be presented separately. Each of the scales contained from 9 to 14 items, and a respondent's score was simply the number of items checked for each scale. The higher the score the more interested and involved the respondent was considered to be in the area under study. The respondents were instructed to check those items that described an activity which they had engaged in during the past year. Each scale covered a rather large number and variety of activities in different areas of interest and society--activities such as discussing, reading, observing, contributing, and participating. Results of each scale follow:
a. Community affairs--the 12 items in this scale ranged from the fairly common, "I talked about local community problems with my friends," to the less common, "I held office in some local civic group or community organization." As Table 8 shows, USMA graduates still on active duty had a mean score of 4.7 (maximum score $=12.0$ ) compared to means of 6.4 for engineering and science graduates and 6.8 for the national norm. This difference can be seen by noting that a larger percentage of the USMA AD group obtained scores of only 1, 2, 3, and 4. However, the mean score of 6.8 for the USMA NAD group was equivalent to the national norm mean. In drawing inferences from these findings, and all those that follow, it must be remembered that the Army community probably is somewhat different from the civilian community.
b. National and state politics--the 14 items in this scale ranged from the discussion of national or state political issues with friends to the
holding of a political or public office. Once again, the USMA AD group obtained the lowest mean number of items checked (5.7--see Table 9). This appears consistent with Army rules and regulations which tend to be apolitical in nature and of ten forbid a soldier from taking an active part in a political venture. However, the highest mean score was the score for the USMA NAD group (7.8), indicating that this group was more actively involved in national and state politics than any other group that was studied.
c. Art--once again, the maximum score could be obtained by checking all of the nine items in this section. The items ranged from talking about art to the actual doing of creative painting or other art work. The highest mean score was that of the USMA NAD group (2.6), and the means of the other groups were quite similar (see Table 10). No group had any individual scoring a maximum of 9.0 , and no USMA group had anyone sccring 7.0, 8.0, or 9.0.
d. Literature--the 9 items under literature ranged from the talking about new books and the reading of book reyiews to the writing of any type of literature for publication. Table 11 indicates that the means of the 3 USMA groups are very similar to each other and about 0.5 and 0.9 higher than the means of the engineering \& science and national norm scores, respectively.
e. Education--the 10 items in this section ranged from the talking with fri.ends about schools in the neighborhood to the reading of one or more books about education. Table 12 summarizes the findings from this section. The mean of the USMA Total group (5.2) is about equal to the mean of the engineering and science group (5.3), but lower than the national norm and USMA NAD group means of 5.8 and 5.7 , respectively. The lowest mean was obtained by the USMA AD group. However, the range of mean scores for all 11 groups is only 0.8.
f. Music--the 11 items ranged from the buying of phonograph records and listening to music on the radio to the playing of a musical instrument and the participation in some vocal or instrumental group. Table 13 reports that the means of the five groups are quite similar with a spread of only 0.7 between them.
g. Drama--the 11 items went from the talking with friends about movies, plays, TV dramas, etc., to the participation in some drama activity. The three USMA groups scored slightly higher than the other two groups, but the range of the means was only 0.6 (see Table 14).
h. Religion--the nine items went from the rather common attending of church services one or more times to the less common practice of observing religious rituals in one's home. The means of the five groups ranged from 5.5 for the national norm group to 4.9 for the USMA AD and USMA Total groups (see Table 15). It should be pointed out that relative to other activity scales, a much larger percentage of respondents obtained the maximum possible score on this Religion scale.
i. Intercultural--the ten items here ranged from the talking with friends about cultural events in other countries to at tending a meeting at which a
large majority of the participants were of a different racial background. Table 16 reports that the means of all three USMA groups are larger than those of the other two groups. The USMA AD group had the highest mean, 4.2.
j. Science--the ten items that could be checked went from talking about science with friends to the making of some type of scientific apparatus. Table 17 shows the highest mean to be that of the engineering and science group ' 5.1 ), and the lowest to be USMA AD group (3.6). The means of the other three groups are quite similar to each other.
k. International--the nine items ranged from the discussion of international relations to the participation in a public demonstration for or against some international issue. The means of the three USMA groups are a little higher than those of the other two groups, as reported in Table 18.
3. The Changing Society--this section of the questionnaire has two parts. The first, called Occurring, measures knowledge and awareness about certain major changes that are taking place in American society; and the second, named Desirable, measures attitudes toward such changes. Results follow:
a. Occurring--the distribution of percentages in Table 19 indicates that most respondents received scores between 18 and 20 (the total number of items was 28, and thus the maximum score score was 28). There is not much variation in the mean scores, which ranged from 18.1 for engineering and science school graduates, to 19.00 for USMA NAD graduates.
b. Desirable--on only 14 of the 28 items in the Changing society were the respondents asked to indicate if the changes in American society were desirable. Thus, the maximum score was 14. The results, as depicted in Table 20, show that there is very little variation in the mean scores. The means, which range from 7.1 to 7.3 , indicate that the respondents felt that only about half of the changes were desirable.
4. Viewpoints--the results of the three parts of this section will be presented one at a time. Each part deals with issues of contemporary concern, and the attitudes of adults about such matters probably have an influence on our society.
a. Government--for this section the higher the score the more the respondent favors interdependence and friendship among all nations, and not an "America Always First" policy. The mean scores of the five groups border at or around 2.0 out of a possible maximum score of 4.0 (see Table 21). The small variation in mean scores indicates that the groups are quite similar in their viewpoints for this art.
b: Women--the five groups obtained idertical mean scores of 2.2 on this part of the questionnaire, indicating that they essentially feel the same about equal opportunities for women (see Table 22).
c. Civil Rights--the small variation in mean scores, 2.3 to 2.8 , implies that the five groups of respondents felt generally quite similar in their
viewpoints toward civil rights (see Table 23).
5. Educational Benefits--this section measures the extent to which a respondent feels he benefited from going to college in three different areas: vocational, personal and social, and liberal arts. The higher the score the more the respondent felt that he benefited very much from going to college.
a. Vocational--the items in this category include vocational training, specialization, facts in various fields of knowledge, and improved social and economic status. The mean scores of the three USMA groups are slightly higher than those of the other two groups, indicating that the former three groups felt that they benefited, vocationally, slightly more than the latter two groups (see Table 24).
b. Personal and social--under this category were included items dealing with social development, personal development, individuality and independence, friendships and tolerance. Table 25 indicates that the mean scores of the three USMA groups are about twice the mean of the national norm group and over three times the mean of the engineering and science group.
c. Liberal education--this category included items about various fields of knowledge and intellectual skills--literature, philosophy, culture, critical thinking, aesthetic sensitivity, communication, science, technology, and citizenship. Once again, all three USMA groups felt that they benefited more in these areas than did their counterparts in civilian institutions (see Table 26).
6. Memory of College Experiences--two scores are derived from items in this section. The first pertains to the extent to which peer or interpersonal relationships stand out in the respondents' memories, and the second concerns the extent to which academic experiences are prominent.
a. Peer--all items in this part had reference to some group activities and peer relationships. The means of all three USMA groups are larger than those of the other two groups, indicating that USMA graduates are more aware of peer relationships while in college (see Table 27).
b. Academic--items here pertain to professors, courses, and scholarships. Table 28 shows that academic experiences were more memorable to civilian school graduates than they were to USMA graduates. The means for the former are slightly larger than the means for the latter.
7. Personal Traits--the three personal traits measured in this section are autonomy, complexity, and theoretical orientation.
a. Autonomy--a high score on this scale indicates a general independence of traditional authority. Table 29 presents data indicating that the engineering \& science and the national norm groups have higher mean scores than the USMA groups. Apparently, the USMA groups are a little less autonomous and more concerned with traditional authority.

b. Complexity--a high score indicates tolerance for ambiguous situations and enjoyment in dealing with complex and novel ideas. The mean scores of the five groups have a range of 11.9 to 12.6 , indicating roughly equivalent amounts of this trait (see Table 30).
c. Theoretical Orientation--respondents scoring high on this trait usually prefer using the scientific method, and thus are logical, analytical, and critical in their approach to problems. Table 31 shows that the mean score for USMA NAD is the highest and that the USMA AD and national norm groups are the lowest on this trait.

## SUMMARY

The purpose of the present study was to compare the responses of USMA and civilian college graduates on a number of topics of current interest. Members of the USMA Class of 1950 were surveyed by means of a questionnaire developed at the Center for the Study of Evaluation at the University of California, Los Angeles (UCLA). Comparison data on 5651 graduates of the Classes of 1950 from 74 civilian colleges and universities were made available by this same Center. In order to make comparisons more meaningful, the respondents to the mailed questionnaires were divided into five groups: USMA graduates who were still on active duty; USMA graduates not on active duty; the total number of USMA graduates who responded to the questionnaire, including the first two groups and also those respondents who could not be classified as either on active duty or not on active duty; graduates from eight engineering and science schools; and graduates from the 74 schools combined, except USMA.

The questionnaire used to obtain the data consisted of items classified under seven major sections, most of which dealt with many of the goals of education which are obtainable and observable only in adult life. A summary of the results from each of these seven sections follows:

1. Background Information--the typical USMA 1950 graduate, as compared to the typical 1950 graduate of other colleges and universities, is more likely to have obtained a master's degree, to have a stronger attraction to his alma mater, to have about as high an income while on active duty, to have a higher income after leaving active duty, and to be more willing to come to USMA again if he could do it all over again. The USMA graduate, as well as the civilian college graduate, is likely to be Republican and of the Protestant faith.
2. Activities--the typical USMA graduate still on active duty is more likely to be less involved in community affairs, national and state politics, education, and science than are the graduates from civilian colleges and USMA graduates not on active duty. However, once the typical USMA graduate leaves active duty, he is more likely to be involved in national and state politics than are members of the other groups, and just as involved in community affairs as the national norm group. The USMA graduate, regardless of active or
not active duty status, tends to be slightly more interested and involved in drama, literature, intercultural activities, and international activities.
3. Changing Society--on the Occurring subscale, the five groups obtained roughly the same scores, indicating that their knowledge and awareness of certain major changes that are taking place in American society is quite similar. As to the desirability of such changes, results of the Desirable subscale showed the groups to be very similar in their attitudes.
4. Viewpoints--no major differences were evident on the three subscales of Government, Women, and Civil Rights, indicating that the respondents possessed similar viewpoints on these three variables. As far as could be ascertained, the responses of the groups appeared to be of the middle of the road variety on these three issues.
5. Educationai Benefits--the three subscales of this section were Vocational, Personal and Social, and Liberal Education. For each subscale, the respondent's score indicated the extent to which he felt that he had benefited from going to college. In the Vocational subscale all three USMA groups felt that going to college was slightly more beneficial to them than did graduates from civilian colleges. On the other two subscales, Personal and Social and Liberal Education, the three USMA groups scored much higher than their counterparts from civilian colleges, indicating that the USMA graduates felt that they had benefited much more in these two areas by going to college.
6. Memory of College Experiences--on the Peer subscale the three USMA groups had higher scores than the two civilian groups, implying that the former are presently more aware of college peer and group activities. For the Academic subscale, which pertained to the extent to which professors, courses, and scholarships stand out in their memories, the graduates from civilian colleges scored higher, meaning that they were more aware of these variables.
7. Personal Traits--consisted of three subscales, Autonomy, Complexity, and Theoretical Orientation. Scores on the Autonomous subscale showed that the USMA groups are slightly less autonomous and more concerned with traditional authority than are the graduates from civilian colleges. On the Complexity subscale, the scores were roughly equivalent, and on the Theoretical Orientation subscale, the mean score of the USMA graduates not on active duty was the highest and that of the active duty USMA graduates and the national norm group's scores were the lowest.

In summation, the five groups have very similar response patterns to some items, yet markedly distinct response patterns to other items. Generally speaking, it appears that the USMA graduate compares favorably, if not more favorably, with graduates from civilian colleges and universities on most of the areas sampled in this study. It is particularly noteworthy to mention the finding that the USMA graduate feels that he has benefited more by going to college than does the graduate from a civilian college or university. However, it must be cautioned that any interpretation of the results of this study must be made in conjunction with the goals, philosophies, values, and beliefs of the schools involved, since they may vary from institution to institution.

11

## APPENDIX A

ALUMNI SURVEY


## ABOUT THE QUESTIONNAIRE......

This inquiry is one of several nationwide studies being conducted by the Research and Development Center at UCLA -- in cooperation with about 100 other colleges and universities.

Its purpose is to understand more fully the activities, interests, and judgments of college graduates.

We believe that such understanding will be of benefit to those who carry out and attempt to improve the educational programs in our colleges and universities, both public and private.

## ABOUT YOUR REPLY......

Your individual reply is confidential.
The return envelope and questionnaire are numbered for clerical purposes only.

Most of the questions can be answered simply by filling in the oval next to the appropriate spaces. Please use a soft lead pencil No. 2 preferred.

We hope you will answer all the questions, but if there are some which you prefer not to answer, omit them.

The questionnaire is being sent to a carefully selected cross-section of college alumni. Your reply is important.

We hope you will find that answering the questions is personally interesting, informative, and well worth the forty five minutes or so of your time to do so.

We appreciate your cooperation.

## ACTIVITIES

The check-lists in this section of the questionnaire cover a rather large number and variety of activities in different areas of interest and society -- activities such as discussing, reading. observing, contributing, and participating. Opportunity, time, interest, and inclination all have a bearing on what one does, can do, or would want to do. No one does everything; every one does something. As you read the statements in these lists, please fill in the oval next to each one that describes an activity you have engaged in during the past year.

## COMMUNITY AFFAIRS

During the past year:
ص I talked about local community problems with my friends.
$\checkmark$ I followed local events regularly in my newspaper.
$\checkmark$ I gave money to the community fund or chest or other local charity.
$\square$ I belonged to a community organization interested in civic affairssuch as PTA, Chamber of Commerce, League of Women Voters, business or professional association, etc.
$\sigma$ I attended meetings of some local civic group.
$\checkmark$ I contributed time or money to some civic project-such as a playground, park, school, hospital, museum, theater, etc.
$\sigma$ I had contact with a local official about some community problem.
$\checkmark$ I collected money, called on my neighbors, carried a petition, or engaged in some similar activity in behalf of a local community project.
$\sigma$ I voted in the last local election.
$\checkmark$ I attended a public hearing about a local issue-such as zoning, schools, taxes, traffic, etc.
$\checkmark$ I participated in a demonstration or protest about a local issue.
$\square$ I held office in some local civic group or community organization.

## NATIONAL and STATE POLITICS

During the past year:
$\sigma$ I discussed political issues with my friends.
$\sigma$ I listened to speeches, news specials, discussion programs, etc. about political issues on TV or radio weekly or monthly.
$\checkmark$ I followed state and national political events regularly in my newspaper.
$\sigma$ I read magazine articles about state and national problems weekly or monthly.
$\sigma$ I read one or more books about politics.
$\sigma$ I voted in the last national election.
$\sigma$ I voted in the last state election.
$\checkmark$ I attended meetings of a political club or group.
$\sigma$ I did some volunteer or paid work for a political party.
$\checkmark$ I contributed money to some political cause or group.
$\sigma$ I talked with an elected official about some problem (national or state).
$\checkmark$ I signed a petition, wrote a letter, card, or telegram concerned with some political issue.
$\checkmark$ I participated in a public protest or rally over some political issue.
$\checkmark$ I held a political or public office (elected or appointed, full time or part time).


## ART

During the past year:I talked about art with my friends.
$\sigma$ I read critiques or reviews of art shows or exhibits in the newspapers or magazines.
$\sigma$ I visited an art gallery or art museum. I attended an exhibition of contemporary painting or sculpture.
$\sigma$ I read one or more books about art, artists, or art history.
$\sigma$ I bought a painting or piece of sculpture.
$\sigma 1$ I attended an art study group or workshop. I contributed money or time in support of some activity related to art.
$\sigma$ I did some creative painting or other art work myself.

## LITERATURE

During the past year:


I talked about new books with my friends. I read book reviews in the newspapers or magazines at ieast once a month.
$\sigma$ I read for personal interest (not business) at least one book a month.
$\sigma$ I bought books for my personal library.I read one or more contemporary novels. I read poetry.
I attended a lecture given by a novelist, critic, poet, or playwright.
$\sigma$ I belonged to a group which discussed books.
$\sigma$ I wrote an essay, story, play, poem, etc., for publication.

## EDUCATION

During the past year:
$\sigma$ I talked with my friends about the schoo!s in the neighborhood.
I visited a local school. I talked with a school teacher or other school official. I read about education in the newspaper. 1 voted (or would vote) in favor of a bond issue or other proposition to provide more money for the public schools.
$\sigma$ I enrolled in a course offered by a college or university.
$\checkmark$ I attended one or more concerts or lectures at a college or university campus.
$\square$ I attended one or more athletic events at a college or university.
$\sigma$ I gave money to a college or university.
$\sigma$ I read one or more books about education.

MUSIC
During the past year:
I bought phonograph records.
I listened attentively to radio music at home or in my car.
$\sigma$ I read reviews of musical performances or new record releases in the newspapers or magazines.
$\sigma$ I talked about music with my friends.
$\sigma$ I attended one or more symphony, opera, or chamber music concerts.
$\sigma$ I attended one or more concerts of contemporary folk music, rock, jazz, etc.
$\sigma$ I read one or more books about music, musicians, or music history.
$\sigma$ I listened to some serious music by contemporary composers.
$\sigma$ I contributed time or money in support of some local musical enterprise.
$\sigma$ I played a musical instrument.
$\checkmark$ I participated in some vocal or instrumental group-choir, orchestra, or other group.

## DRAMA

During the past year:
$\sigma$ I talked about movies, plays TV dramas, etc. with my friends.
$\checkmark$ I watched TV dramas at least once a month.
$\checkmark$ I went to the movies at least once a month.
$\sigma$ I read theater or movie reviews in the newspapers or magazines at least once a month.
$\sigma$ i read one or more books about the theater, or a book of plays.
$\square$ I attended one or more plays-either professional or amateur.
$\sigma$ I belonged to a group which discussed contemporary drama.
$\sigma$ I attended one or more plays by a contemporary dramatist.
$\square$ I saw several movies that could be described as experimental, avant garde, etc.
$\sigma$ I contributed time or money in support of some local theatrical enterprise.
$\sigma$ I participated in some drama acti-vity-acted, danced, sang, worked on sets or costumes, made movies, etc.

## RELIGION

During the past year:
$\sigma 1$ attended church services one or more times.
$\sigma$ 1 belonged to a church. 1 contributed a regular sum of money to the church.
$\checkmark 1$ read articles about church or religious activities in the newspapers or magazines.
$\checkmark 1$ read one or more books about religion.
$\checkmark 1$ attended one or more church functions held during the week.
$\checkmark 1$ did some volunteer work for my church.
$\sigma$ I discussed ideas, practices, or problems of religion with my friends.
$\sigma$ I observed religious rituals in my home (said grace before meals, lit candles on the Sabbath, etc.).

## INTERCULTURAL

During the past year:
$\checkmark 1$ talked with my friends about people and cultural events in other countries.
$\sigma$ I saw one or more foreign movies. 1 went to a concert, theater, or exhibition which featured the art, music or drama of another country.
$\square 1$ corresponded with a citizen of another country.
$\checkmark$ I traveled in another country.
$\sigma$ I entertained a visitor from another country.
$\sigma$ I read one or more books by authors from another country.
$\checkmark$ 1attended one or more meetings or lectures about other countries or about other racial or ethnic groups.
$\checkmark$ I participated in efforts to improve understanding between countries, races, or ethnic groups.
$\sigma$ I attended a meeting at which a large majority of the participants were of a racial background different from mine. (If so, what was the racial background of most of the participants? Underline one: Black, Brown, Yellow, White, Other.)

## SCIENCE

During the past year:
ص 1 talked about science with my friends.
$\rightleftharpoons$ I watched special presentations about science on TV.
$\sigma$ I read articles about new developments in scientific research in the newspapers or magazines.
$\checkmark$ I attended a scientific exhibit or museum.
$\checkmark$ I read a new book about science. I stibscribed to a magazine about science.
$\sigma 1$ attended a lecture or demonstration on some aspect of science.
$\checkmark$ I attended meetings of a science study club or work group.
$\square 1$ carried out a scientific experiment, recorded scientific observations of things in the natural setting, or assembled and maintained a collection of scientific specimens.
$\checkmark$ I made some piece of scientific apparatus-such as a hi-fi component, photo-enlarger. telescope, etc.

## INTERNATIONAL

During the past year:
ص I discussed international relations, foreign policy, the U. N. etc., with my friends.
$\sigma$ I read newspapers or magazine articles dealing with international relations.
$\sigma$ I read one or more books about other countries or international relations.
$\checkmark$ I read U. N. publications or listened to U. N. sponsored programs on radio or TV.
$\checkmark 1$ contributed time or money for some international group or project.
$\sigma$ I spoke to a civic group or club on international relations or foreign policy.
$\checkmark$ I attended one or more meetings or lectures about international affairs or foreign policy.
$\sigma$ I wrote to a news publication or government official in behalf of some legislation or U. S. policy regarding international relations.
$ص$ I participated in a public demonstration for or against some international issue.

## THE CHANGING SOCIETY

There are periods of history when change seems to be more turbulent than others. Often the directions of change seem unclear: and people differ in their judgment about whether particular trends or tendencies are desirable or undesirable. We have listed below a number of statements that describe changes or tendencics which may or may not be occurring in the United States. For each statement indicate first, in the left hand columns, whether you think the change or trend it describes is or is not occurring -- by filling the appropriate oval Generally True, Don't Know, or Generally Not True. Then after some of these statements, and in the right hand columns, you will find space for an additional response. For this response, indicate whether you think the change described would be desirable or undesirable if it in fact occurred or is occurring.



## VIEWPOINTS

The statements below express viewpoints that some people agree with and others don't. Indicate your own attitude by filling in one of the ovals to the left of each statement ( $\mathrm{A}=$ Agree; ? = No Opinion $;$ D = Disagree.)


Government planning should be strictly limited, for it almost inevitably results in the loss of essential liberty and freedom.

We are not likely to have lasting peace unless the U.S. and its allies are stronger than all the other countries.
$\square \varnothing \square$
The United Nations should have the right to make decisions that would bind members to a course of action.
$\hookrightarrow \varnothing$ Literature should not question the basic moral concepts of society.
$\varnothing \varnothing$ The United States has enough natural resources and scientific know-how to be economically self-sufficient.

Parents know as much about how to teach children as public school teachers know.

More women should be involved in policy formation both in business and government.
$\curvearrowleft \curvearrowleft$ Professional women should have the same benefits and opportunities as their male colleagues.
$\hookrightarrow \propto$ Being a housewife provides many opportunities to apply broad and creative interests.

Family patterns and attitudes should allow, and often encourage, married women to follow their own interests, even if they have young children.
$\rightarrow \infty$ If Negroes live poorly, it is in great part the fault of discrimination and neglect from whites.
$\square$ Anyone, no matter what his color, who is willing to work hard can get ahead in life.
$\hookrightarrow ๑$ More money and effort should be spent on education, welfare, and selfhelp programs for the culturally disadvantaged.

Issues such as law and order, civil rights, and public demonstrations are complex and need careful evaluation and judgment of individual cases.

People who advocate unpopular or extreme ideas should be allowed to speak on college campuses if the students want to hear them.

## SOME EDUCATIONAL BENEFITS

In thinking back to your undergraduate experience in college or university to what extent do you feel that you were influenced or benefited in each of the following respects? Please fill in one of the ovals for each of the items listed below.


## SCHOOL AND COLLEGE EXPERIENCE

The benefits one gets from education are related, at least in part, to various aspects of personal background and experience - the kind of school, what one studied, and other experiences during the school and college years. This section of the questionnaire asks about some of these factors.

From what kind of a high school did you graduate? (Mark one)

About how many students were in your high school graduating class? (Mark one)

```
\(\checkmark\) Fewer than 100
\(\sigma\) Between 100 and 500
\(\square\) More than 500
```

As well as you can recall, about how many students in yrur high school class went to college?
(Mark one)
$\sigma$ All, or nearly all
$\checkmark$ Most
$\square$ About half
$\sigma$ Less than half
$\square$ Very few
When did you decide that you wanted to go to college?
(Mark one)
$\checkmark$ After I had graduated from high school
$\checkmark$ During my last year in high school
$\sigma$ During the junior year in high school
$\sigma$ During the sophmore year in high school
$\checkmark$ Earlier than any of the aboveDon't remember
Among your circle of friends in high school, about how many went to college? (Mark one)
$\checkmark$ All, or nearly all
$\checkmark$ Most
$\int$ About half
$\square$ Less than half
$\sigma$ Very few

Approximately what was your average grade in High School? and in College? (Mark one in each column)

High School


When you were in college, where did you reside most of the time? (Mark one)
$\square$ Dormitory
$\square$ Fraternity or sorority
$\sigma$ Rooming house
$\int$ Apartment
$\checkmark$ At home, or with relatives
$\checkmark$ Other?

Is the college from which you received your Bachelor's degree the same as the college you entered as a freshman? (Mark one)
$\sigma$ Yes
$\sigma$ No. If no, what other college(s) did you attend? $\qquad$

How much time elapsed between your enrollment in college as a freshman and your graduation with a Bachelor's degree? (Mark one)
$\checkmark$ Four years (or less)
$\checkmark$ More than four years. If more, what accounted for the added time?

What is the name of the college from which you received your Bachelor's degree?
$\left.\begin{array}{lll}\begin{array}{ll}\text { In College } \\ \text { what was } \\ \text { your } \\ \text { major } \\ \text { field of }\end{array} & \begin{array}{l}\text { In Gradu- } \\ \text { ate School } \\ \text { what was } \\ \text { your major } \\ \text { field of } \\ \text { (Mark one) }\end{array} & \begin{array}{l}\text { What field } \\ \text { is most } \\ \text { study } \\ \text { (Mark onely re- }\end{array} \\ \text { lated to } \\ \text { your present } \\ \text { work? } \\ \text { (Mark one) }\end{array}\right]$

What is the highest level of education obtained by you? (Mark one)
$\square$ Bachelor's degree
$\checkmark$ Master's degree
$\sigma$ Doctorate degreeAdvanced professional degree

If you have a graduate or professional degree, where did you obtain it?

Are you currently enrolled in graduate school or do you have plans to attend? (Mark one)
$\sigma$ Yes, currently enrolled
$\sigma$ Yes, plan to enroll
$\sigma$ No

If yes, what is the highest level you
expect to obtain? (Mark one)
$\checkmark$ Some graduate work
$\checkmark$ Master's degree
$\sigma$ Doctorate degree
$\sigma$ Advanced professional degree
Where? $\qquad$
Major field?
How sure are you of this? (Mark one)
$\sigma$ Very sure
$\sigma$ Fairly sure
$\sigma$ Unsure

When you were in college did you ever discuss any of the following topics with a counselor? or a faculty member? or your parents? (Mark as many as apply under each)

Coun-


As well as you can recall, about how much did you participate in various activities when you were in high school and college? For each type of activity listed below, please Mark the amount of your participation in it. If the activity was not available (did not exist) in your school or college, please so indicate by Marking in the special columns.

In HIGH SCHOOL
Not
Available

What stands out in your memory about your college experience? (Mark as many as apply)
$\sigma$ Living away from home
$\int$ Living in a dormitory
$\checkmark$ Fraternity or sorority activities
$\square$
Informal discussion with other students


Participation in sports
Particular professors who took a personal interest in me
$\sigma$ Particular professors who encouraged me in my work
$\sigma$ Particular professors who were hard to get along with
$\sigma$ Having to work at a job and still keep up with my studies
$\square$ The experience of being involved in some extra-curricular activi-ty-such as, music, drama, politics, etc.
$\sigma$ Particular courses that were especially hard and demanding
$\sigma$ Particular courses that opened up new interests for me
$\square$ The experience of leadership in some campus activity
$\square$ Some lectures that were particularly stimulating
$\sigma$ Realizing what the demands of good scholarship really are
$\sigma$ Having lots of dates
$\checkmark$ Meeting the person I married
$\checkmark$ Having to be responsible for my choices and activities
$\square$ Worrying about whether I would really be able to graduate
$\square$ Anything else? What? $\qquad$

What is your present feeling about your college? (Mark one)
$\sigma$ I have a strong attachment to it.
$\sigma$ Pleasantly nostalgic, but no strong feeling.
$\sigma$ More or less neutral.
$\sigma$ Generally negative.
$\sigma$ Thoroughly negative.
When you were in college, how well did you like it? (Mark one)
$\square$ I was enthusiastic about it.
I liked it.
$\sigma$ I was more or less neutral about it.
$\sigma$ I didn't like it.

If you could do it over again, would you go to the same college from which you received your Bachelors' degree? (Mark one)
$\sigma$ Yes, definitely
$\sigma$ Probably yes
$\sigma$ Probably no
$\sigma$ No, definitely

Regardless of any vocational benefit college may have had for you, would you now say that going to college was a very important and beneficial experience in your life? (Mark one)

## PERSONAL INFORMATION

People differ in many ways - in age, sex, marital status, in where they have lived and traveled, in the kinds of work they do, in their politics, religion, race ethnic background, in what they like, and in how they see themselves. Information about such matters is clearly relevant to a research study that is attempting to learn more about the lives of college-educated adults in our society. We hope you will be willing to answer all of these questions. If you have strong feelings about not answering a particular question, then don't answer it! We would remind you that all your responses are confidential, and that we have not asked you to write your name anywhere in the questionnaire. In answering fill in the oval next to the answer you choose.

How old are you? (Mark one)

|  |  |
| :---: | :---: |
| $\square$ under 21 |  |
| $\square$ 26-30 |  |
| - 31-35 |  |
| $\square 36-40$ |  |
| 41-45 |  |
| $\square$ 46-50 |  |
|  | $\square$ over 50 |

Are you $\qquad$ ? (Mark one)


What is your marital status?
(Mark one)
$\sigma$ Single
$\square$ Married
$\checkmark$ Separated, widowed, or divorced

Do you have any children? (Mark one)
 $\sigma$ No

How many children are living in the same household with you? (Mark one)

What is the highest level of education obtained by your parents? (Mark one in each column)

Father Mother


Advanced professional


Which of the following best describes the community you think of as your residence-Before college? and Today? (Mark one in each column)

Before
College Today


Big city:

(500,000-2,000,000) (over 2,000,000)

Suburb in a metropolitian area of:

(under 500,000)
(500,000-2,000,000)
(over $2,000,000$ )
 $\square$
$\square$

About how many books do you have in your home? And about how many books were in your parent's home at the time you were going to college? (Mark one in each column)


Approximately what is your current economic status (annual income from all sources, including your spouse's)? And about what was your parent's income when you were in college? (Mark one in each column)


With respect to political choices. how do you usually think of yourself? and your parents? (Mark one in each column)


What do you identify as the predominant ethnic or national background of your ancestors? (for example, English, Irish Polish, Italian, Swedish, German, etc.)

Did any of your recent ancestors (parents or grandparents) come to the United States from another country? (Mark one)


Which of the following best describes your religious identification? And the identification of your parents? (Mark one in each column)

| You | Parents |  |
| :---: | :---: | :---: |
| $\sigma$ | $\square$ | Catholic |
| $\square$ | $\square$ | Jewish |
| $\sigma$ | $\sigma$ | Protestant (What denomination?) |
| $\sigma$ | $\square$ | No formal religion |
| T | $\sigma$ | No definite religious belicfs |
| $\sigma$ | $\sigma$ | Other? |
| $\sigma$ |  | Prefer not to answer |

What is your racial identification?

In what parts of the country have you lived during various periods of your life? (Mark as many as apply under each)

| Before | During | After |  |
| :---: | :---: | :---: | :---: |
| College | College | College | Nortast |
|  |  |  | Northeast |
| $\square$ | $\square$ | $\square$ | Middle Atlantic |
| $\square$ | $\square$ | $\square$ | South |
| $\sigma$ | $\square$ | $\square$ | Midwest |
| $\square$ | $\sigma$ | $\sigma$ | Southwest |
| $\sigma$ | $\sigma$ | C | Mountain States |
| $\sigma$ | $\sigma$ | $\sigma$ | Far West |
| $\sigma$ | $\sigma$ | $\sigma$ | Outside the U. S. |

What is the approximat: total length of time you have spelt+ in countries outside of the U. S.? (. .ark one in each column)


In the country where you have spent the most time, outside the U. S., what was the main reason for your being there? (Mark one)

| $\square$ | Have not been in other countries |
| :---: | :---: |
| $\square$ | Armed Forces service |
| $\square$ | Work |
| $\square$ | Study |
| $\square$ | Personal travel |
| $\square$ | I was a resident of the country |

Were you ever in the Armed Forces? (Mark one)
$\square$ Yes
$\square$ No

Please classify your father's major occupation and your own present fulltime occupation by marking the category which seems to fit best. (Note that the last category under the heading "you" is "housewife". Mark this only if you are a housewife fulltime. If you work outside the home part-time, do not mark "housewife", but instead mark the nature of your work in the third column headed "Part-time".)

Part-

## Father You Time

$๑ \quad \backsim$ Professional 1 (typically requiring a doctorate or advanced professional de-gree--such as doctor, lawyer, professor, etc.)
$\varpi \quad \infty$ Professional 2 (typically requiring a master's degree or some professional training beyond col-lege-such as teacher, engineer, accountant)


What exactly is your occupation? What do you do-for example, sales manager of an insurance company, chemical research in an oit company, teach physical education in high school? $\qquad$ '?
$\qquad$

In what kind of organization do you work? (Mark one)

$\square$ Self employed<br>$\rightarrow$ Business or industrial firm<br>Educational agency<br>Government agency<br>$\curvearrowleft$ Other non-profit agency

Which of the following things do you do fairly regularly in your work?
(Mark as many as apply)
$\curvearrowleft$ Plan your own work
$\int$ Supervise others
$\rightleftarrows$ Make policy decisions
$๑$ Write reports
$\curvearrowleft$ Do original research or writing
$\int$ Keep records
$\square$ Instruct others
$\leftrightarrows$ Counsel or advise others
$\hookrightarrow$ Make speeches or present reports
$\int$ Organize operations
$\int$ Attend meetings
$๑$ Analyze data
Which of the following characteristics do you associate witl you work? (Mark as many as apply)


Among your circle of friends today (the people you frequently see, talk with, and do things with), about how many are college graduates'?
(Mark one)
> $\varnothing$ All, or nearly all
> $\square$ Most
> $\int$ About half
> $\backsim$ Less than half
> $\square$ Very ficw

## VOCABULARY

This vocabulary "test" is designed to provide information on the word power of college graduates. Some of the words are very difficult. Only a few people can define all of them correctly, so do not be surprised if some or many of them are unfamiliar to you.

The words to be defined are printed in capital letters. Underneath each of these capitalized words, look for a word that comes closest to the same meaning and fill in the oval in front of that word. Do not consult a dictonary!

| HYPOTHESIS: <br> $\sigma$ logic | ANTITHESIS: <br> $\sigma$ choice | LUDICROUS: <br> $\sigma$ clear | $\stackrel{\text { DIFFIDENT: }}{\sigma \text { shy }}$ |
| :---: | :---: | :---: | :---: |
| $\square$ procedure | $\square$ response | $\sigma$ comical | $\sigma$ unusual |
| $\square$ mistake | $\square$ awareness | $\square$ believable | $\square$ quarrelsome |
| $\sigma$ reality | $\sigma$ research | $\checkmark$ profitable | $\sigma$ sarcastic |
| $\sigma$ supposition | $\sigma$ opposite | $\sigma$ stupid | $\sigma$ polite |
| ILLUSTRIOUS: | STIGMA: | IRASCIBLE: | PEDANTIC: |
| $\sigma$ witty | web | $\sigma$ restless | $\square$ heavy |
| $\sigma$ dead | $\sigma$ taint | $\sigma$ reddened | $\square$ mischievous |
| $\sigma$ photographed | $\square$ darkness | $\sigma$ methodical | $\sigma$ harsh |
| $\checkmark$ famous | $\sigma$ dream | $\sigma$ cranky | $\sigma$ stilted |
| $\sigma$ busy | $\sigma$ creed | $\sigma$ righteous | $\square$ walking |
| IMMINENT: <br> $\sigma$ weak | EULOGY: <br> $\sigma$ praise | DECOROUS: <br> $\sigma$ proper | EQUIVOCAL <br> $\sigma$ loud |
| $\sigma$ wicked | $\sigma$ poetry | $\sigma$ conscientious | $\sigma$ deceitful |
| $\sigma$ approaching | $\square$ funeral | $\checkmark$ gaudy | $\square$ mild |
| $\sigma$ huge | $\sigma$ harmony | $\square$ pompous | $\sigma$ just |
| $\square$ subjective | $\sigma$ substitution | $\sigma$ unaware | $\sigma$ doubtful |
| FACILE: | AUSTERE: | ABSTRUSE: | EPHEMERAL: |
| $\sigma$ easy | $\checkmark$ thin | $\sigma$ sharp | $\checkmark$ many-colored |
| $\square$ true | $\square$ severe | $\sigma$ evident | $\square$ short-lived |
| $\sigma$ artificial | $\sigma$ starry | $\sigma$ obscure | $\sigma$ future |
| $\sigma$ witty | $\sigma$ strange | $\sigma$ blunt | $\sigma$ feminine |
| $\sigma$ deceptive | $\sigma$ colorless | $\sigma$ irregular | $\sigma$ obscure |
| BLATANT: | AMBIGUOUS: | SUCCINCT: | SEDULOUS: |
| $\checkmark$ flaming | $\sigma$ changeable | $\sigma$ enveloping | $\checkmark$ untiring |
| $\sigma$ noisy | $\sigma$ defective | $\sigma$ tasty | $\sigma$ tempting |
| $\sigma$ windy | $\sigma$ versatile | $\checkmark$ terrifying | $\sigma$ evil |
| $\sigma$ common | $\sigma$ doubtful | $\sigma$ terse | $\square$ jealous |
| $\sigma$ colorful | $\sigma$ dishonest | $\sigma$ helpful | $\sigma$ rebellious |

## PERSONAL TRAITS

We all have different preferences and personal characteristics. We would like to know more about the relationship of different choices and traits to important college and subsequent carecr experiences. On the left please mark all the items below that you generally find to your liking. On the right, please mark all the adjectives that you think are generally descriptive of you.
(Please Mark all the items that apply)

I generally like:


I generally am:

|  | Well-organized |
| :---: | :---: |
| $\square$ | Practical |
| $\square$ | Individualistic |
| $\square$ | Questioning |
|  | Predictable |
| $\square$ | Open-minded |
| $\square$ | Introspective |
| $\square$ | Experimental |
| $\sigma$ | Creative |
| $\square$ | Undistracted |
| $\square$ | Analytical |
| $\square$ | Critical-minded |
| $\square$ | Scientific |
| $\square$ | Sociable |
| $\sigma$ | Contemplative |
| $\square$ | Dutiful |
| $\sigma$ | Determined |
| $\square$ | Conventional |
| $\square$ | Unrestrained |
| $\square$ | Adaptable |
|  | Permissive |
|  | Worried |
| $\square$ | Happy |
| $\sigma$ | Calm |
| ) | Self-confident |
| $\square$ | Nervous |
| $\sigma$ | Anxious |
|  | Restless |

32

We are most appreciative of your cooperation in completing this questionnaire. To us, a questionnaire is nothing more nor less than an effort to ask honest and relevant questions in the hope that honest and relevant answers will be given. We believe that higher education is a very important fact in our society; and that those who are responsible for it, or are concerned about it, should know as much about it as they can. If our study, thanks to the response which you and thousands of others will give us, helps to provide the basis for better informed judgments, positive or ncgative, our efforts will have been worthwhile.

If there is anything you would like to add - about yourself, or your college, or socicty in general, or this questionnaire in particular, please do so. Again, thank you for your interest, your time, and your sincerity. We hope that having this look at your own activities, views, and experiences has been of some interest and benefit to you.
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$\qquad$

## APPENDIX B

## TABLES 1 THROUGH 31

I gTgvi
highest level of education attained*

| Type of Institucion | Bachelor's Degree | Master's Degree | Advanced <br> Professional Degree | Doctorate Degree | N |
| :---: | :---: | :---: | :---: | :---: | :---: |
| USMA AD | 32\% | 64\% | 2\% | 3\% | 133 |
| $\underbrace{\omega} \text { Cfo }$ | 49 | 41 | 8 | 3 | 39 |
| USMA Total | 33 | 60 | 3 | 4 | 326 |
| $\begin{aligned} & \text { Engineering } \\ & \text { \& Science } \end{aligned}$ | 71 | 20 | 2 | 7 | 1060 |
| National Norm | 59 | 25 | 9 | 7 | 5651 |

TABLE 2


玉 茴 \%
0
N
N
0
0
-1
0
0
0

TABLE 3
SATISFACTION WITH COLLEGE CHOICE






5651


| 官\| | $$ | $\begin{aligned} & \infty \\ & \dot{\sim} \end{aligned}$ | م | $\begin{aligned} & \dot{H} \\ & \dot{N} \end{aligned}$ | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\|\infty\|$ | $\stackrel{F}{8}$ | $\infty$ | $\begin{aligned} & N \\ & 10 \end{aligned}$ | $\begin{aligned} & H \\ & 0 \end{aligned}$ | $\cdots$ |
| $z 1$ | $\begin{aligned} & 10 \\ & \end{aligned}$ | on | p్p | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 10 0 0 |



$$
\begin{aligned}
& \begin{array}{llllll}
|x| & \therefore & \infty & N & 0 & \dot{~} \\
& \therefore & \div & 0 & \div & \div
\end{array}
\end{aligned}
$$





$$
\begin{array}{c|ccccc}
\dot{A} \\
\dot{0} & \infty & \infty & 0 & N & \infty \\
\dot{-} & \dot{N} & \dot{N} & \dot{N} & \dot{N}
\end{array}
$$

$$
\begin{array}{ll}
0 & -1 \\
0 & 15 \\
0 & 0 \\
1 & 10
\end{array}
$$

TABLE 13
ACTIVITIES SCAIES: MUSIC
Percent of Alumni Obtaining Each Score
Type of
TUSMA AD




| $\underset{\sim}{H}$ | $59$ | $\bigcirc$ | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{O} \\ & \mathrm{H} \end{aligned}$ | $80$ | 0 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| 0 | $50$ | 0 | $\bigcirc$ | $\bigcirc$ | $\cdots$ |
| $\infty$ | $\begin{aligned} & 89 \\ & 1 \end{aligned}$ | $m$ | N | $\square$ | N |
| $N$ | $59$ | 10 | 15 | N | H |
| 0 | $\begin{aligned} & 89 \\ & 60 \end{aligned}$ | 윽 | $\infty$ | $\infty$ | N |
| 10 | $\begin{aligned} & 80 \\ & 10 \\ & 1 \end{aligned}$ | $10$ | $\underset{\sim}{\underset{H}{4}}$ | $\xrightarrow{\text { N }}$ | $\stackrel{m}{-1}$ |
| H | $\begin{aligned} & 80 \\ & 6 \\ & 0 \end{aligned}$ | $\underset{\sim}{\infty}$ | $\begin{aligned} & N \\ & N \end{aligned}$ | $\stackrel{H}{H}$ | $\underset{\sim}{0}$ |
| $\cdots$ | $\begin{aligned} & 80 \\ & i 0 \\ & i \end{aligned}$ | $\begin{aligned} & \infty \\ & \mathbf{N} \end{aligned}$ | $\stackrel{\infty}{\boldsymbol{N}}$ | $\begin{aligned} & 10 \\ & 0 \end{aligned}$ | $\underset{N}{H}$ |
| N | $\begin{aligned} & 50 \\ & 0 \\ & 0 \end{aligned}$ | 15 | $\stackrel{N}{H}$ | $\stackrel{\infty}{1}$ | $\underset{-}{\oplus}$ |
| $\cdots$ | $\begin{aligned} & \stackrel{\circ}{4} \\ & \stackrel{1}{4} \end{aligned}$ | $\cdots$ | 0 | $\stackrel{O}{\mathrm{O}}$ | $\sigma$ |
| 0 | $89$ | $\infty$ | 15 | 0 | 15 |
|  | $\underset{\sim}{\infty}$ |  |  |  | $\begin{aligned} & \text { E } \\ & \text { H } \\ & 0 \\ & \text { H } \\ & \text { H } \\ & \text { 0 } \\ & 0 \\ & 0 \\ & \text { H } \\ & \text { Z } \end{aligned}$ |

$$
\begin{array}{ccccc}
\dot{0} & \ddot{0} & \sim & 0 & 0 \\
\dot{\sim} & \dot{N} & \dot{9} & \dot{N} & \dot{N}
\end{array}
$$

$$
\begin{array}{llllll}
|x| & 0 & \pi & 0 & \ddots & 10 \\
& \dot{4} & \dot{0} & \dot{4} & \dot{\circ} & 10
\end{array}
$$



$$
\text { TABLE } 17
$$

ACTIVITIES SCALES: SCIENCE
Percent of Alumni Obtaining Each Score

| TABLE 18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | AC' | VITIE <br> of | SCA <br> mni | tai | TERN | TIO | Lere |  |  |  |  |  |
| Type of Institution | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | N | $\underline{X}$ | S. D. |  |
| USMA AD | 1\% | 1\% | 31\% | 26\% | 19\% | 13\% | 5\% | 2\% | 1\% | 0\% | 135 | 3.4 | 1.4 | $\cdots$ |
| USMA NAD | 3 | 0 | 31 | 41 | 13 | 5 | 8 | 0 | 0 | 0 | 39 | 3.1 | 1.3 |  |
| USMA Total | 1 | 2 | 31 | 29 | 16 | 13 | 5 | 2 | 1 | 0 | 330 | 3.3 | 1.4 |  |
| Engineering \& Science | 3 | 7 | 51 | 24 | 9 | 4 | 1 | 1 | 0 | 0 | 1060 | 2.5 | 1.2 |  |
| National Norm | 3 | 7 | 44 | 26 | 11 | 5 | 2 | 1 | 0 | 0 | 5651 | 2.7 | 1.3 |  |

ERIC


$\begin{array}{cccccc}\dot{0} \\ \dot{i} & 0 & 0 & 0 & -i & -i\end{array}$




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\because \mathbf{a b o t}
$$

0.5

$$
\begin{array}{cccccc}
\dot{0} \\
\dot{i} \mid & 0 & 0 & 0 & H & 0 \\
i & i & i & i & i
\end{array}
$$

$$
\begin{array}{lccccc}
|x| & N & N & \cdots & \cdots & N \\
& \cdots & \sim & \sim & \infty & \infty
\end{array}
$$


30
58


| $\varepsilon^{\bullet} \mathrm{L}$ | $0^{*}$ L | LG99 | $\varepsilon$ | モ | 8 | $\varepsilon[$ | LZ | ZS | man teuotyen |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0^{*} \mathrm{I}$ | $9^{\circ} 0$ | 090T | I | Z | モ | 6 | L马 | $\varepsilon 9$ | əวนәтอS 8 ภuṬ．xəəuȚ．ชิu |
| $G^{\bullet}$＇ | $6^{\circ} \mathrm{T}$ | 0\＆E | 9 | OT | LT | ZZ | もて | LZ | ［e70w VNSn |
| $9^{\circ} \mathrm{L}$ | $0^{\circ} \mathrm{Z}$ | 68 | 8 | GT | $\varepsilon T$ | I $\%$ | 97 | 8T | CVN UWSA |
| $g^{\bullet} \mathrm{L}$ | $6^{\circ} \mathrm{T}$ | $\mathrm{g} \varepsilon \tau$ | \％L | \％L | $\% 8 \mathrm{~T}$ | \％97 | \％ZZ | \％6T | dV VINSn |
| ${ }^{\prime} \mathrm{C}^{*} \mathrm{~S}$ | $\underline{X}$ | N | G | モ | $\varepsilon$ | $Z$ | I | 0 | uoṭクロ7！7suI јо әdКL |
| əxoos uoen sututeqqo tuunty fo queoxed |  |  |  |  |  |  |  |  |  |
| TVIDOS 8 TVNOS4Ed ：SLIAGNAG TVNOLJVDnag |  |  |  |  |  |  |  |  |  |
| GZ TIGVL |  |  |  |  |  |  |  |  |  |

$7_{81}^{24} 63$


$$
\begin{array}{llllll}
10 & 0 & 0 & 0 & -1 \\
n & 0 & ल & 0 & 10 \\
& & ल & 0 & 0 \\
& & & 1 & 0 & 0
\end{array}
$$

TABLE 27
MEMORY OF COLLEGE EXPERIENCE: PEERS
Percent of Alumni Obtaining Each Score


ORY


| 9 | $\infty$ | $\bigcirc$ | 0 | N | $\cdots$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| - | $\cdots$ | ヘ | $-$ | $\sim$ | N |
| \| 41 | N | $\sigma$ | 10 | - | H |
|  | 4 | $\dot{8}$ | $\dot{\nabla}$ | $15^{\circ}$ | ค |
| द | $\begin{aligned} & 10 \\ & \\ & \hline 1 \end{aligned}$ | ¢ | $\begin{aligned} & \text { O } \\ & \text { ల్ల } \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 1 \end{aligned}$ | 10 08 10 |






[^0]:    **********************************************************************

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[^2]:    *The clerical difficulty was caused by the fact that roughly 47 percent of the respondents fatled to fill in their identification numbers th the spaces provided for them. The identification number allowed the respondents to be classified on active duty or not on active duty.

[^3]:    *Bridges, C.F. The Image of the United States Military Academy Among Cadets and Graduates. Office of Institutional Research, USMA, West Point, NY, in preparation.

