

CAREER PREFERENCES OF MEDICAL STUDENTS
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OBJECTIVES AND METHODS

The objectives of the study were to provide reliable empirical information in four areas of inquiry:

Medical students' career incentives, plans, and preferences;

Their opinions concerning participation in Federal (including military) medical programs, either for a short period or as a long-term career;

Opinions and levels of information on four Army medical training programs (the Clinical Clerkship, the Senior Medical Student program, the Military Internship, and the Military Residency);

The characteristics of medical students that may be related to varying degrees of interest in military medical careers or training programs.

The study was undertaken in the belief that the findings would have relevance to the Army Medical Service's efforts in recruiting junior Medical Officers.

The study was carried out by a nation-wide personal interview survey of 1,086 male medical students, conducted in May and early June, 1956. A "probability" sample was utilized, and each medical student in the base population (male citizens who would be less than 33 years old at graduation) had an equal probability of being selected for interview. Forty-four schools were selected, by random methods after stratification, from the total number of accredited medical schools in the United States. Students were selected by name from the Association of American Medical Colleges' file of students in attendance at sample schools. Of the 1,114 eligible students in the sample, 97.5 per cent were interviewed. This high completion rate makes it possible to place considerable reliance in the representativeness of the sample, particularly as far as the "sample census" background information for medical students is concerned.

Since the study involved a sampling survey rather than interviews with all medical students, the findings are subject to some chance variation from the results that would have been obtained through a complete enumeration. Section A of the Appendix provides estimates of the limits of such chance variation, as well as further details of the sampling procedure and comparisons between the characteristics of the students who were interviewed and those of the medical school population as a whole.

I.

SUMMARY OF THE PRINCIPAL FINDINGS

This summary presents some of the main findings that are reported in detail in Sections A through E.

A. CAREER INCENTIVES AND PREFERENCES OF MEDICAL STUDENTS

Medicine as a career: the average medical student appears exceptionally well-content with his choice of a profession, and is looking forward with considerable confidence to achieving his specific career and income goals.

The principal satisfactions students say they anticipate achieving through their medical careers are related to doctor-patient relationships: - "helping others, being of service, being useful"; "working and dealing with people"; a preference for working directly with patients almost all the time; and the opportunity to know their patients well. At least on the verbal level, medical students place only secondary emphasis on such satisfactions as financial returns, economic security, professional prestige, social position, or the opportunity to conduct scientific research.

Disadvantages of medicine as a career are not emphasized by medical students in general. The drawbacks most frequently mentioned are that the doctor's work may interfere with his personal or family life and can involve long hours and night calls. These may reflect traditional status-enhancing complaints that are a hallmark of the profession rather than an indication of dissatisfaction with medicine as a career.

In career plans, highly traditional preferences predominate. Eighty-seven per cent of the medical students prefer a non-salaried career--an independent practice, an individual practice with the pooling of certain facilities with other physicians, or a group practice in a partnership arrangement. Only one per cent choose "Medical Officer in one of the Armed Forces" as a preferred career; and Armed Forces medicine is most frequently specified as the type of career the medical students would like least.

Seven in ten expect to spend most of their working years in the type of medical career they prefer. Career preference and expectations do vary somewhat, depending upon the type of medical career desired. Eighty-six per cent of those who would prefer an independent individual practice expect to have this type of practice, whereas 63 per cent of those preferring a group practice in a partnership expect to achieve their goal. Most of those who desire a group practice but do not expect to achieve it expect to fall back upon an individual non-salaried practice; they are not much more interested than others in either short-term or long-term service in the Armed Forces.

This study shows most medical students to be more privileged in their families' economic and educational background than the population as a whole. Most medical students come from environments where relatively high incomes and living standards are likely to be taken for granted. They are surrounded during medical training by fellow students of generally similar backgrounds; and throughout their advanced schooling are exposed to a set of medical traditions that puts a high premium on non-salaried rather than salaried, and private rather than public, medical careers. Students who do choose to go on to a military medical career are usually departing from the established norms of their environment. In short, most influences on the medical student are such as to discourage active interest in a medical career in the Armed Forces.

Class-in-school differences in career preferences are shown in Fig. 1. Even during the freshman year, most medical students have in mind both a specific preference for a type of career and a medical specialty. Such choices are subject to a limited degree of change with progress through school: freshmen are more inclined than seniors to prefer an individual independent practice, while seniors tend to prefer a group partnership practice. These differences may reflect seniors' greater knowledge of the limitations of an individual practice and the advantages of group practice

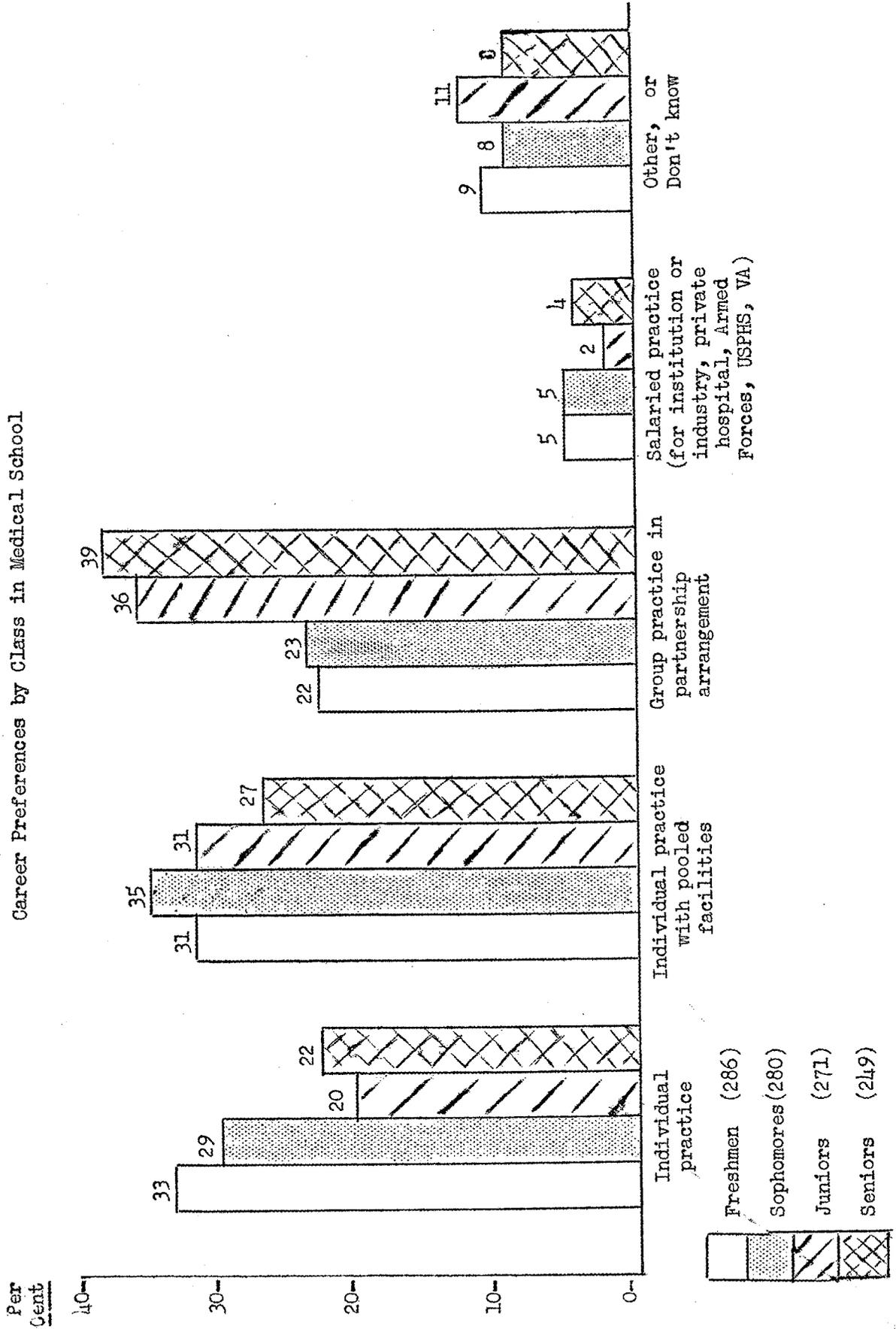
Reasons for preferring a type of practice are focused primarily upon independence: the chance to be one's own boss. Those who would choose independent individual practice stress independence and the importance of doctor-patient relationships; those who would choose a group practice emphasize the advantages of lessened interference with family life through sharing night-calls, opportunities for consultation with colleagues, and the availability of better facilities.

Reasons for liking the Armed Forces least as a medical career are concentrated in dislike for "regimentation" and an implicit limitation of professional freedom. It appears that many who speak of "regimentation" in Armed Forces medicine are voicing an uninformed, stereotyped reaction. Whether this reaction is justified or not, the widespread existence of the stereotype is one of the primary liabilities to be overcome in Armed Forces procurement.

Specialization: findings reflect the trend away from general practice toward specialization. One-fourth expect to go into a general practice, 14 per cent expect to specialize to some extent but are not currently planning to take a residency, and 57 per cent plan to continue their medical training through a residency in some speciality. Findings reveal some differences between "non-specialist" and "specialist" groups of students: those planning on a general practice are more concerned about doctor-patient relationships, and "specialists" are more oriented toward such "intellectual" aspects of medicine as science or research or teaching, meeting challenging diagnostic problems, having prestige within the profession, and having concerns about "regimentation" and the limitation of the individual.

FIGURE 1

Career Preferences by Class in Medical School



The differences appear great enough to warrant somewhat different types of appeals in Armed Forces recruitment among the "non-specialist" and "specialist" groups of medical students.

Income expectations of medical students are rather high. Their median estimate of net income ten years after medical school is \$14,580; the median estimate at the height of the student's career is about 50 per cent greater, or \$22,340. Even the median expected income only ten years out of medical school is about as high as a medical student would be likely to achieve at the height of a medical career in the Armed Forces.

It is of interest to note that the income expectations of seniors are slightly higher than those of lowerclassmen.

B. ATTITUDES TOWARD FEDERAL AND MILITARY MEDICINE

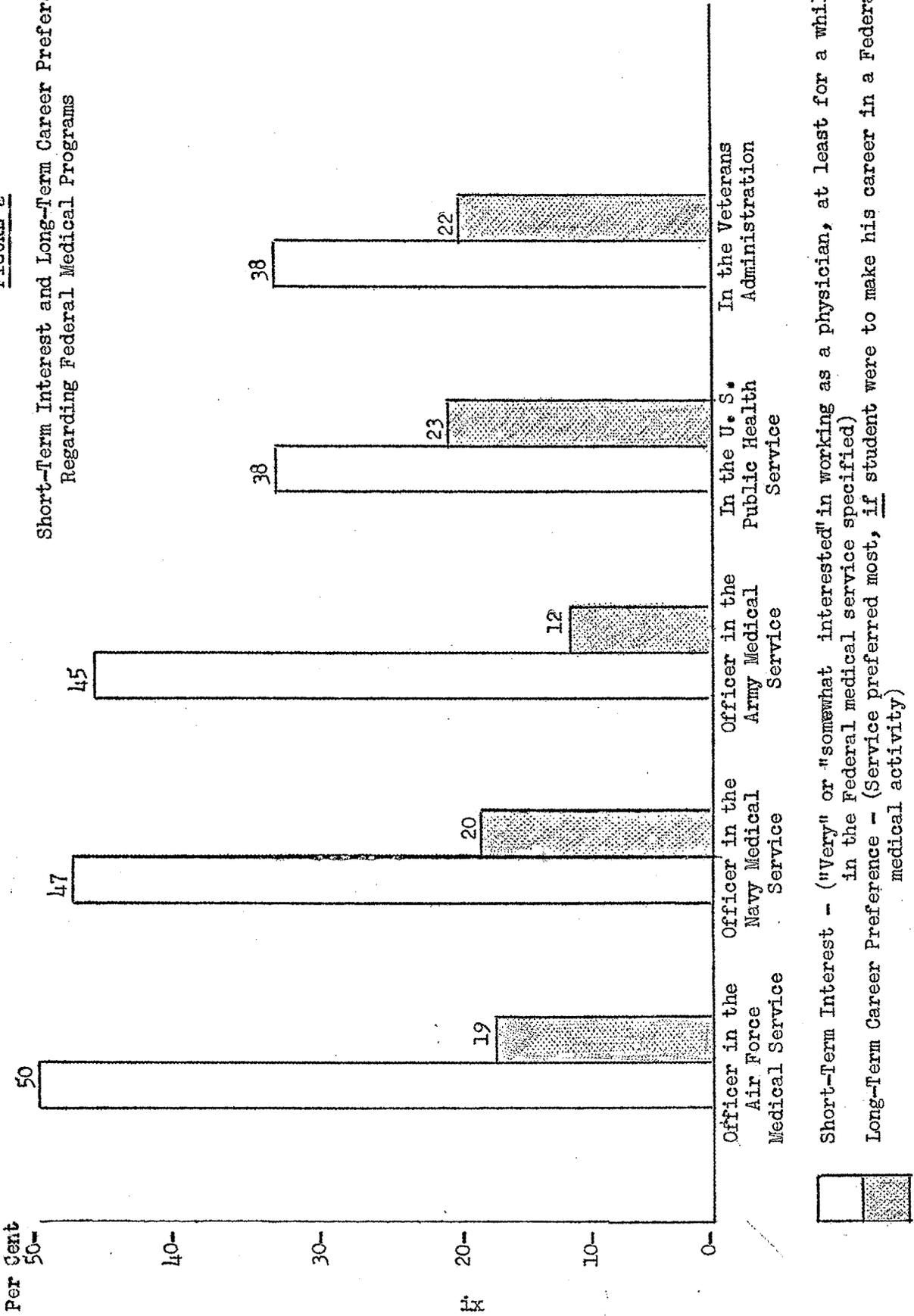
For most medical students, a medical career is synonymous with private practice. Consistent with this general outlook is the finding that no more than 11 per cent report themselves as "very interested" in even short-term duty as a physician in one of the Federal medical agencies--i. e., one of the Armed Forces, the U. S. Public Health Service, or the Veterans Administration. However, substantial numbers report being at least "somewhat interested" in short-term service in a Federal agency: expressions of interest range from 50 per cent for the Air Force to 38 per cent for the USPHS and the VA, with 45 per cent reporting some interest in short-term Army Medical Service duty.

Long-term career preferences limited to the five Federal medical agencies favor the USPHS and VA over the three military services. The Army Medical Service is chosen by the fewest (12 per cent) for a long-term career, but is preferred by a larger proportion of seniors than freshmen.

Differences in short-term-duty interest and long-term career preference are shown in Fig. 2. The Armed Forces Medical Services are preferred over the civilian services for short-term duty; the converse is true of the long-term career preferences among the five Federal agencies. In part the differences may reflect the distinctions, as seen by the medical students, in viewing the several Federal medical agencies from short-term and long-term standpoints. It is suspected, however, that an even more influential factor is that students who are scheduled to go into one of the Armed Forces for two years' active duty may be inclined to make--or to simulate to themselves or to others--an anticipatory adjustment by expressing some interest in temporary duty in the Armed Forces. Further, some students might tend to state a short-term interest in Armed Forces service because they might be aware that Veterans Administration duty does not count toward fulfilling the present two-year military requirement, and might not know that U. S. Public Health Service duty can discharge the service requirement.

FIGURE 2

Short-Term Interest and Long-Term Career Preference Regarding Federal Medical Programs



Short-Term Interest - ("Very" or "somewhat interested" in working as a physician, at least for a while, in the Federal medical service specified)
 Long-Term Career Preference - (Service preferred most, if student were to make his career in a Federal medical activity)

Reasons for preferring a particular agency among the five for a long-term career center upon an interest in the agency's objectives, problems, or the opportunities; the quality of the medical facilities; and the resemblance to private or civilian practice. Among the Armed Forces Medical Services, each is seen as having one outstanding attraction: for the Army and Navy, calibre of physical facilities, professional staff, and the quality of medical care; and for the Air Force, aero-medical research and allied features. The Army is preferred relatively more often by those who plan on a group practice and are concerned about practice facilities, and relatively less often by those with a problem- or research-orientation. The converse is true of the Air Force.

Reasons for not preferring an agency center largely upon bureaucratic "regimentation" and lack of professional freedom, and the uncongeniality of an agency's problems or objectives. The feeling is widespread that the Army doctor in particular is severely limited in his professional activities. Those who would like the Navy least tend to emphasize a fancied limitation in location of assignment (such as shipboard duty); and the new Air Force Medical Service is thought to be rather limited in the quality of physical resources and staff.

The Army is singled out for criticism on the grounds of "bureaucratic regimentation" at least three times as often as either of the other military services. This tendency indicates that the word "Army" may set off a negative stereotype, in which the Army is more immediately associated than the other services with the image of Selective Service and the drafting of doctors, even though all three services obtain officers through the doctor draft.

The conclusion that these opinions are based upon stereotypes or hearsay rather than more complete information is further supported by the fact that relatively high proportions of students are unable to give reasons for or against their choices of service, the concentration of responses within relatively few categories, and other indications that relatively few medical students have given much prior consideration to the possibility of long-term Armed Forces careers. Such stereotypes among students can be a serious handicap to Armed Forces procurement efforts; if men act upon stereotypes as though they are real, the consequences can be very real.

Specific aspects of military and Army medicine: medical students compare military medicine to civilian medicine unfavorable in many respects. While they concede that military medicine has certain advantages, the advantages generally are viewed as minor in one's own choice of a career:

On the one hand, students have favorable opinions on the contributions which Armed Forces medicine has made to medical science; on the other hand, they hold rather unfavorable opinions of Armed Forces physicians who are the source of these contributions.

A majority are of the opinion that civilian medicine is superior to military medicine in the opportunities it offers to qualify for certification by an American Specialty Board, in opportunities to utilize one's special skills and training, and in the availability of a sufficient variety of medical cases to meet one's professional needs.

Students appear to be well aware of the most widely-publicized advantages of a military medical career, such as the initial rate of pay, retirement provisions, less responsibility or worry in establishing a practice, and more regular hours of work. However, not everything that students report as an advantage in military medicine is really conceived of as an advantage. The fact that the Armed Forces offer economic security and retirement pay are more than counterbalanced by derogatory opinions of Armed Forces physicians who "simply seek economic security in the military," or by the student's own high earning expectations. The suggestion that the Armed Forces offer shorter and more regular hours of work is offset by the attitude that hours of work are relatively unimportant and the idea that military physicians are lazy. The "advantage" of less responsibility or worry is outweighed by the notion that Armed Forces physicians are less interested than civilian doctors in their patients or in medicine in general.

This report does not attempt to provide a handbook of "do's" and "don'ts" for Armed Forces medical recruitment. However, the prevailing sentiments among medical students are such that information which stresses the similarities in goals and advantages of Armed Forces and civilian medicine is more likely to be successful than recruitment information which emphasizes dissimilarities or any special advantages inhering in Armed Forces medicine that are not available in civilian medicine.

The most common sources of impressions about Army medicine are fellow medical students, civilian physicians, medical school faculty members, and relatives who were in some non-medical branch of service. The only sources cited as mainly favorable to Army medicine by a plurality of students who recalled getting information about Army medicine from them were Army sources--officers on duty with the Army Medical Service.

Three particular groups are often reported by students to be involved in unfavorable impressions about Army medicine and military service:

- fellow medical students
- physicians outside the Army Medical Service
- medical school faculty members.

Students' impressions about the favorableness or unfavorableness of information about Army medicine from various sources are likely to be colored by their own prior attitudes and actions. Moreover, it is the impression the student gets, rather than the accuracy of his memory about what he hears regarding Army medicine from various sources, that is important in forming and reinforcing medical students' attitudes.

C. OPINIONS ON FOUR MILITARY MEDICAL TRAINING PROGRAMS

Medical students were asked for each of the training programs offered by the Armed Forces (the Clinical Clerkship, the Senior Medical Student program, the military Internship and Residency):

- whether they were aware that each of these programs is offered by several of the Armed Forces
- what advantages and disadvantages they see in their own participation in the program
- what changes they suggest in the program
- how interested they would be in participating in such a program.

Awareness that these programs do exist varies according to the length of time a program has been in operation. More students are aware of the Armed Forces' residency and internship programs (91 per cent and 97 per cent, respectively) than of the newer clinical clerkships (80 per cent) or the senior medical student program (81 per cent).

Awareness that a program exists also varies with the student's class level: upperclassmen are generally more knowledgeable about the programs than freshmen are. Knowledge of a program's existence is generally highest among students in the classes most immediately concerned: more juniors than others have heard of the clinical clerkships and senior medical student programs, and a higher proportion of upperclassmen than lowerclassmen have heard of the internship and residency programs.

Advantages and disadvantages: generally, more students mention disadvantages than advantages to themselves in participating in the programs. Income from participating in the programs is the leading advantage mentioned, except for the short-term summer clinical clerkships. Advantages in learning or training opportunities are mentioned relatively seldom. The disadvantage most frequently mentioned, except for the clinical clerkship, is the commitment for military service one makes in accepting an appointment. As will be seen later, there is some misunderstanding about the actual military service commitments made in accepting appointments. Fairly frequently mentioned as a disadvantage also is the opinion that participation in one of these military programs will have an adverse effect on the student's future medical career.

Suggestions for changes are relatively few. The leading one is that the military service commitment be eliminated or reduced. Other rather frequent suggestions are that the training might be of higher quality, or that there might be greater flexibility or more individualized assignment and training of participants.

Interest in participation in the programs, (those at least "somewhat interested" in participating) is as follows for the four programs:

64 per cent for the Clinical Clerkship

61 per cent for the Internship

45 per cent for the Senior Medical Student program

37 per cent for the Army Residency

More students are interested in the programs among those who feel they are "almost certain" to go on active military duty or who come from families that are less well-to-do than the average among medical students.

It is likely that the actual amount of interest in the programs is somewhat less than the figures above would indicate, since expressions of interest were elicited immediately after the student had been informed of the details of the programs and since no conditions whatever were placed on expressions of interest. Nonetheless, there is apparently a large potential of students interested in participating in the programs, and prospects for successful recruitment to the programs appear good.

D. LEVELS OF INFORMATION CONCERNING THE TRAINING PROGRAMS

In addition to determining whether students knew there were such programs, the study contained eight questions to ascertain correctness of information on certain aspects of the training programs, such as pay, rank, and the obligations involved in the various programs. Sources of information about the programs were also explored.

Level of information: as measured by these eight questions, 16 per cent of the students are "well informed" (answered at least seven of the eight questions correctly,) and 15 per cent are "poorly informed" (answered fewer than three of the eight correctly.) Medical students tend to overestimate the amount of pay-back time in the programs.

Some groups of students are better-informed on the programs than others. Among these are:

--upperclassmen

--those who earned money during the school year

--those who are interested in participating in the programs

--students who obtained information on the programs from Army Medical Service procurement officers or medical school faculty members, rather than students who got their information from other medical students.

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Sources of information: three-fourths of all students report getting information on the four Army programs from other medical students; one-half say they obtained information from Army Medical Service procurement officers, and 37 per cent say they obtained information from medical school faculty members.

E. CHARACTERISTICS OF STUDENTS INTERESTED IN ARMY MEDICINE

This study provides a number of indications that, currently, only a relatively small proportion of medical students would choose the Armed Forces as a career. In this national sample of medical students:

Only one per cent choose "Medical officer in one of the Armed Forces" as the career in which they prefer to spend most of their professional lives.

Only two per cent say that if net income from civilian and military medical careers were absolutely the same, they would prefer a career in military rather than civilian medicine.

Only eight to 11 per cent report that they would be "very interested" in working as a physician, even for a while, in the Army, or Navy, or Air Force medical services.

These findings are consistent with those of other studies, mentioned in Findings in Detail, conducted since World War II.

Even so, if it were possible for the Army to recruit doctors, a larger proportion of whom would stay in the Service throughout their careers, only a relatively small proportion of each year's medical school graduates would be needed to maintain the Army Medical Corps at authorized peacetime strength. This study was not designed for the specific purpose of distinguishing the kinds of students who would be more likely to make a career of Army medicine if offered the opportunity. However, analysis of the characteristics of students who express some interest in short-term or long-term Army service may be helpful in Army efforts to concentrate medical recruitment efforts on those groups of medical students who show the highest potential for careers as Medical Officers.

The following summary identifies the groups of students which have a greater-than-average percentage of men indicating some interest in serving as an Army physician, either short-term or as a career.

--those who cite good facilities, staff or program as advantages to an Armed Forces career. (less-than-average interest is expressed by those who cite as "advantages" the fact that a practice in the service is already assured, or that an Armed Forces medical career involves less responsibility or worry than civilian practice)

--those who view Armed Forces career medical officers as being no different from civilian physicians

- those who believe patients in Army hospitals generally get better care than they would get in civilian hospitals
- those who think they would have available in the Army a sufficient variety of patient cases to meet their professional needs
- those who recall obtaining impressions of Army medicine from Regular Army Medical Corps officers. (Those whose impressions came from relatives who were non-military doctors, or from their own experiences in military service, are below average in their interest in Army medicine.)
- seniors in medical school
- those who plan to specialize to some extent, but who are not now planning to take a residency
- those who think they are "almost certain" to go on active duty some time in the future
- those (relatively few) who hold a Reserve or National Guard commission; and those who have had advanced R. O. T. C. training
- those who did not participate in sports in high school or pre-medical college training
- those who have a close relative, though not in the immediate family, who was a physician. (However, those who have a parent who has been a physician constitute one of the groups least interested in Army medicine as a career.)
- those whose fathers worked and had a net income the previous year of less than \$7,500
- those whose fathers did not complete high school, or whose fathers had undergraduate college training only.

While an Army medical career is somewhat more attractive to medical students who are relatively underprivileged financially, the weight of the evidence indicates that an emphasis in recruitment information upon economic advantages of an Army career-- financial security, pensions and retirement benefits, and possibly higher income at the beginning of a career-- is not likely to be a particularly effective appeal to present-day medical students. Only very few (12 per cent) think it will be "very difficult" to get along financially until they are established in their medical careers, and they are no more interested in Army careers than other students are. Economic advantages in an Armed Forces career are generally recognized by medical students, but recognition of these economic advantages does not appear to be materially related to interest in a medical career in the Army.

II

FINDINGS IN DETAIL

A. CAREER INCENTIVES AND PREFERENCES OF MEDICAL STUDENTS

1. Medicine as a Career

In his conceptions of medicine as a career, the average medical student in the United States appears well-content with his chosen profession, and is looking forward with considerable confidence to achieving the particular medical career--and the income--to which he aspires. Illustrative findings:

Fifty-three per cent agree that medicine is "the only career that could really satisfy me"; only one per cent agree with the statement that "I can think of other careers that would be more satisfying to me." There is no difference on commitment to medicine as a career between those who are just completing their first year of medical training and those about to graduate.

The satisfactions of medicine as a career are stressed much more often than the possible limitations. Among the satisfactions mentioned by medical students (see Table 1), the leading ones are "helping others; being of service; being useful," "working or dealing with people," "financial returns; security,"* "prestige; social position," and "scientific or research interest; opportunity to learn."

Only two types of drawbacks to being a doctor (see Table 2) are mentioned by as many as one-third of the students: "interference with personal or family life" (mentioned by 40 per cent) and "long hours; late hours; night calls" (33 per cent). Even these two are not to be interpreted as being voiced with much misgiving on the part of medical students. Two earlier NORC reports have commented on the semi-institutionalized nature of such statements by doctors, the conclusion being, "There is no evidence that it is a serious source of resentment. ...physicians take for granted... long hours, and frequently it is even a source of pride and gratification through the feeling it gives ... of being needed and useful."**

* "Financial returns; security," third in order of mention, evidently is taken for granted by most medical students. The median estimate of net income ten years after graduation is \$14,580.

** "The Interne Looks at the Army," (Chicago, 1947). Similar interpretations appear in "Careers for Medical Men," Report No. 38 (Chicago, 1948).

TABLE 1

"What do you think you will like best about being a doctor?"

Helping others, being of service, being useful.	55%
Working or dealing with people.	36
Financial returns, security.	29
Prestige, social position.	27
Scientific interest, research interest, learning opportunity .	24
Challenge, stimulation, or variety of work	21
Psychological or emotional returns as consequence of work . .	20
Independence, freedom, being own boss	17
The work itself, things a doctor does	12
Miscellaneous	5
Don't know, all of it	1
No answer	<u>*</u>
Some mention more than one.	247%

(1086)**

* Throughout these tables "*" equals less than one-half of one per cent.

** In all tables numbers in parentheses are the base on which percentages are computed.

TABLE 2

"What do you think you will like least about being a doctor?"

Interference with personal or family life.	40%
Long hours, late hours, night calls.	33
Problem patients, difficult patient attitudes.	13
Feelings of inadequacy, not knowing everything about medicine.	11
Mental, emotional, or physical strain on the doctor.	10
Tragedies, depressing situations or cases	7
Professional medical politics, professional competition	5
Problems arising from financing of medical care	4
Medical-legal problems	2
Miscellaneous	22
Don't know, there isn't anything	4
No answer	<u>1</u>

Some mention more than one. 152%

(1086)

The preferred aspects of medical work appear to be those which are especially related to the care of patients rather than to other aspects of a medical career. This is seen not only in the spontaneously-given reasons for preferring medicine as a career mentioned above ("helping others; being of service; being useful," "working or dealing with people"), but also in the preferences expressed in answer to a number of questions about detailed elements involved in a medical career.

In answer to the question, "In your main career, would you prefer to work at medical problems that do not require frequent contacts with patients; or, work directly with patients almost all the time?" nine out of ten choose working "directly with patients almost all the time."

The primacy of the doctor-patient relationship is re-emphasized by student ratings of the relative importance of certain factors in their own careers. "Having the opportunity to know your patients well" is rated by more students as "very important" in deciding on one's medical career than is any one of six other considerations.

TABLE 3

"I'd like to know how important certain considerations will be to you personally in deciding on the kind of medical career you would like to have. First, would you say that 'Having the opportunity to know your patients well' would be: 'Very important,' 'fairly important,' or 'not at all important'?"

	<u>Very important</u>	<u>Fairly important</u>	<u>Not at all important</u>	<u>No opin.</u>	<u>Total</u>
Having the opportunity to know your patients well	74%	24%	2%	0%	100%
Meeting diagnostic problems that are particularly challenging	68	30	2	*	100%
Having enjoyable relationships with colleagues	68	29	3	*	100%
Having patients who will appreciate your efforts	52	43	5	*	100%
Having prestige within the medical profession	31	61	8	*	100%
Making a good income	16	77	7	-	100%
Being able to establish your own hours of work	16	65	18	1	100%

Although the medical students' orientation is primarily in the direction of treating patients, additional or alternative medical activities are not ruled out entirely. Substantial numbers of students indicate at least some interest in spending part of their time in medical administration, teaching, or research after they complete their training. Teaching is the most popular of the three activities; administration, the least.

TABLE 4

"How interested do you think you would be in spending at least part of your time in... after you have completed your training?"

	<u>Very interested</u>	<u>Somewhat interested</u>	<u>Not very int., Not int. at all</u>	<u>Total</u>
--medical teaching	41%	42%	17%	100%
--medical research	21	41	38	100%
--medical administration such as running a hospital	5	24	71	100%

Relatively few seniors (19 per cent) express any interest in medical administration, in contrast to 36 per cent of freshmen who report themselves as at least "somewhat interested." *

2. Type of Practice

Highly traditional preferences predominate in the types of medical careers students want and expect to go into:

Eighty-seven per cent would prefer a career in some non-salaried type of practice: by themselves, or individual practice with the pooling of certain facilities with other doctors, or in a partnership arrangement. Only one per cent choose "Medical Officer in one of the Armed Forces," and only three per cent choose other types of salaried careers.

"Medical Officer in one of the Armed Forces" is named most often as the type of career liked least among the eight types of careers listed for students' choices. Ninety-six per cent designate some type of salaried medicine as the kind they would like least, while only two out of a hundred specify individual practice (with or without pooled facilities) as liked least.

Eighty-three per cent think they are most likely to spend most of their working years in some type of private practice. Only one per cent say their most probable career would be as a "Medical Officer in one of the Armed Forces."

Medical students' career desires and expectations are summarized in Table 5.

Seven out of ten students say they think they are "most likely" to spend most of their working years in the type of medical work that they prefer. The highest proportion of those expecting to practice in the way they prefer is found among those who elect "individual practice," and the lowest proportion among those who prefer a "group practice in a partnership arrangement." Eighty-six per cent of those choosing individual practice anticipate having that type of practice. Sixty-three per cent of those preferring group practice in a partnership arrangement expect to have a group practice, but 21 per cent anticipate spending most of their time in individual practice instead. (See Table 6)

* Throughout this report, differences between students in the four medical school classes will be reported only when such differences are substantial and especially relevant.

TABLE 5

"In what type of medical career would you prefer to spend most of your time after you finish training...? Which type of career would you like least? Regardless of your preferences now, in what type of career do you think you are most likely to spend most of your working years?"

<u>Careers (listed on card from which students chose)</u>	<u>Prefer</u>	<u>Like least</u>	<u>Expect most</u>
Individual practice	26%	1%	38%
Individual practice with pooled facilities	31	*	25
Group practice in a partnership arrangement	30	1	20
Salaried practice for an institution or industry	2	22	3
Salaried practice in a private hospital	1	6	2
Medical Officer in one of the Armed Forces	1	36	1
Physician in the U. S. Public Health Service	*	20	*
Veterans Administration	*	12	-
Some other career	8	*	6
No preference; don't know	1	1	2
No answer	<u>*</u>	<u>1</u>	<u>3</u>
	100%	100%	100%

TABLE 6

Comparison of Preferred Type of Practice and Most Likely Type of Practice

<u>Most likely type of practice</u>	<u>Preferred type of practice</u>		
	<u>Indiv. prac.</u>	<u>Indiv. prac., pooled facil.</u>	<u>Group practice</u>
Individual practice	86%	22%	21%
Individual practice, pooled facilities .	6	69	6
Group practice	2	3	63
Public, private salaried practice . . .	2	2	3
Other	-	-	*
No choice	<u>4</u>	<u>4</u>	<u>7</u>
	100%	100%	100%
	(285)	(337)	(320)

Most of those who prefer a group practice but expect to have some other type of practice, see an individual (non-group) practice as most likely. It is not known whether those who prefer a group practice but expect to have an individual practice are much or little concerned about the possibility of not being able to get into a group practice. If these students have their hearts set on a group practice because of advantages not found in individual practice, they might be interested in an Armed Forces career on the grounds of the similarities between Armed Forces and group medicine. However, this possibility does not appear very strong, from the evidence in hand; those who prefer a group practice are not materially more interested than others in working "at least for a while" as an officer in the Army Medical Service.

There are some differences by class in school on these questions about careers. The differences are shown earlier in Figure 1. Illustrative differences which seem worthy of note are:

On the question of choice of career, seniors are more inclined to choose group practice in a partnership arrangement (39 per cent) than are freshmen (22 per cent). More freshmen choose individual practice (33 per cent) than do seniors (22 per cent).

More upperclassmen (three-fourths) than sophomores (65 per cent) think they are most likely to spend most of their working years in the medical work they prefer. In part this difference may reflect a growing confidence in achieving original career goals, and in part it may indicate that upperclassmen have modified their goals somewhat to be more in keeping with the possibility of achievement than have sophomores.

Seniors hold the Armed Forces in somewhat less disfavor than freshmen do: 29 per cent of the seniors, in contrast to 38 per cent of the freshmen, name the Armed Forces as the career they would like the least. Two of a number of possible reasons for this are: the more prolonged exposure of seniors to information on Armed Forces careers, and the imminence of duty in the Armed Forces.

Reasons for preferring a type of practice: The reasons students give for choosing a particular way in which to practice are closely linked to the satisfactions and dissatisfactions they anticipate in medicine and to the relative value they place on the various components of a career. The most frequently mentioned reason is the desire for independence and the opportunity to be one's own boss. Next most frequently mentioned as reasons are: availability and economy of equipment and technical help; availability of professional consultation and advice; and less interference with personal and family life.

Table 7 presents reasons given by all students and by those with a preference for one of the three types of practice chosen by more than two per cent of the students. The reasons students give vary with the type of practice they choose. Those who pick individual practice stress independence and patient contact, while those choosing individual practice with pooled facilities speak most often of availability or economy of equipment, and the availability of advice or consultation--as well as the personal independence found in such a practice. Those students who prefer group practice emphasize the lessened interference with family life, the opportunities for consultation, the intellectual stimulation possible in such an arrangement, and the availability of facilities and equipment which group practice makes possible.

TABLE 7

"What are your main reasons for preferring (type of career) rather than some other medical career?"

	<u>All stating prefer- ence</u>	<u>Indiv. prac., pooled facil.</u>	<u>Group prac.</u>	<u>Indiv. prac.</u>
Desire for independence in practice, be own boss	44%	60%	10%	79%
Facilities, equipment, technical help better, cheaper, or more available	33	72	31	*
Advice, consultation more available.	28	33	57	*
Less interference with personal, private life	24	13	62	2
Nature of patient contact, relations with people, their need for help	16	15	7	27
Intellectual stimulation, learning opportunities	12	6	22	2
Special professional opportunities	11	2	8	3
Economic considerations	11	9	12	11
Type of clinical material	3	2	1	4
Miscellaneous	7	5	8	6
Don't know, no answer	<u>2</u>	<u>1</u>	<u>1</u>	<u>4</u>
Some mention more than one.	191%	218%	219%	138%
	(1077)	(337)	(320)	(285)

Reasons for not liking a type of practice are presented in Table 8, for all students and for the types of careers mentioned as liked least by six per cent or more of the students. The reasons given for disliking various kinds of practice are largely the converse of those mentioned for preferring a type of practice. "Regimentation" and the implicit limitation of professional freedom is the reason given most often; it is mentioned more than twice as often as any other reason. Other reasons mentioned by more than ten per cent are: an unsatisfactory doctor-patient relationship, a limited income or chance for advancement, and a restricted variety of case material.

TABLE 8

"What are your main reasons for liking (type of career) least?"

	<u>All stating preference</u>	<u>M.O. in Armed Forces</u>	<u>Sal. prac. inst. or ind.</u>	<u>M.D. in USPHS</u>	<u>M.D. in VA</u>	<u>Sal. prac. priv. hosp.</u>
Regimentation, hierarchization	52%	71%	50%	35%	42%	53%
Unsatisfactory doctor-patient relation	20	11	22	32	27	21
Limitation on income, chance for advancement	17	12	25	19	8	39
Limited type of clinical material	15	13	27	4	25	14
Dislike of primary type of work involved	11	1	7	38	10	2
Monotonous, routine job	10	8	19	8	7	8
Poor opinion of staff, standards, facilities, care given	9	9	5	9	14	8
Frequency of moves, instability of home	6	16	*	3	-	-
Dislike of administrative, office, or paper work	6	5	3	9	9	-
Dislike of probable location of practice	4	8	1	5	3	2
Miscellaneous	14	10	9	11	26	17
Don't know, no answer	<u>2</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>-</u>
Some mention more than one.166%	167%	169%	174%	175%	164%

(1070) (385) (240) (219) (132) (66)

"Regimentation" is mentioned most often by those who name "Medical Officer in the Armed Forces" as the type of career they would like least. It may well be that many who speak of "regimentation" in Armed Forces medicine may be voicing an uninformed, stereotyped reaction. Regardless of whether the response of "regimentation" as applied to Armed Forces medicine is justified or unjustified, the widespread existence of such a reaction is a major liability to be overcome in Armed Forces medical procurement.

3. Salaried Medicine

Disadvantages of salaried medicine: fee-for-service medical practice, with the freedom of action it permits the practitioner, is the choice of nine-tenths of the medical students today. Conversely, salaried practice in any form is usually rejected.

Fear of restriction and the limitation of the individual doctor's judgment are the most prevalent objections to salaried practice. Other criticisms--that the doctor has little variety in the case material he handles, that the relationship between him and his patient is unsatisfactory, that his chance for advancement and income is determined by others--are variations on this same theme.

There is little difference between the objections expressed against salaried-private and salaried-public practice. Such differences as do arise are the consequence of unique features of the public agencies in question--tour of duty in the Armed Forces, the primary objective of the USPHS, the staff and facilities of the VA.

The disadvantages students find in salaried practice are not simply the negation of advantages found in other forms--poorer facilities or equipment, decreased availability of advice or consultation, or greater interference in the doctor's personal life. The fundamental criticism of salaried practice is that it is thought to limit unduly and unwisely the individual doctor in the material with which and the way in which he practices and in such aspirations for personal and professional success as he may have.* Even those who plan a salaried practice seem to subscribe, consciously or unconsciously, to this belief. Using income expectations as a criterion, those favorable enough to salaried practice to plan a career in it anticipate incomes (ten years after graduation from medical school) averaging \$11,670, at least \$3,000 less annually than students expecting a non-salaried practice.

The "Salaried Practitioner": only tentative inferences can be drawn because of the small numbers (four per cent) who choose a salaried type of practice.

* E. C. Hughes has commented pertinently on the influence in medicine of ideologies from other aspects of modern life, saying "Although the world of business uses the term private entrepreneur, there is plenty of evidence that the model business man is seen as a team worker rather than a person who goes it alone. It is possible that in some respects the medical model is a hangover from the outmoded one of the business world." ("The Making of a Physician--General Statement of Ideas and Problems," Human Organization, XIV ^{Winter}, 1956/7, 23.)

Students favoring salaried practice appear to differ markedly from others in the professional values they hold. Compared to all other students, would-be "salaried practitioners" are:

More inclined to think it "Very Important" to be able to establish work hours

Less inclined to think it "Very Important" to have an opportunity to know patients well

More inclined to consider appreciative patients unimportant

More inclined to want to work at medical problems not requiring frequent patient contact

Less inclined to think professional prestige important

Less inclined to think making a good income important

Less inclined to anticipate difficulty financially before their careers are established

More inclined to choose a practice arrangement for the unique facilities or special professional opportunities it affords

It is fairly clear that would-be "salaried practitioners" tend to be problem-oriented rather than patient-oriented, to be more interested in regular hours of work and less in success in the eyes of the profession or the public. As such, salaried medicine offers this small minority of students positive rewards and opportunities rather than personal and professional restriction.

4. Medical Specialization

The trend away from general practice toward specialization in recent decades is reflected in the responses of today's medical students. Table 9 shows that while one student in four reports that he expects to go into general practice, 71 per cent expect either to take a residency or to specialize to some extent.

TABLE 9

"After your internship (and a possible two years in the Armed Forces), which are you most likely to do--to have a general practice, or to specialize to some extent, or to take a residency in some specialty?"

General practice.	25%
Specialize to some extent . . .	14
Take a residency.	57
Something else.	1
Have no idea yet.	3
No answer	*

100%

The proportion of seniors planning to enter general practice (21 per cent) is smaller than the proportion of freshmen with such plans (30 per cent). Conversely, less than half of the freshmen (46 per cent) but two-thirds of the seniors expect to take a residency after their internship.

Those who plan on a general practice differ somewhat from other medical students in their medical values, and their attitudes toward specific aspects of Armed Forces medicine (taken up in detail in Section B). The more apparent differences are presented in Table 10.

TABLE 10

<u>Among those planning a general practice, compared to others</u>	<u>Most likely medical career</u>	
	<u>General practice</u>	<u>Specialize some, take residency</u>
Fewer cite science or research as a satisfaction in medicine	18%	26%
Fewer mention interference with personal or family life as a disadvantage of medicine	35	42
More cite long hours, night calls as a disadvantage of medicine	40	31
More say it is "very important" to have the opportunity to know one's patients well	82	71
Fewer say it is "very important" to be able to establish one's own working hours	8	18
Fewer say it is "very important" to meet diagnostic problems that are particularly challenging	62	70
Fewer say it is "very important" to have prestige within the medical profession	25	32
Fewer are at least "somewhat interested" in spending at least part time in medical teaching	69	89
Fewer are at least "somewhat interested" in spending at least part time in medical research	51	65
Fewer cite regimentation and limitation of the individual as a disadvantage in an Armed Forces career	66	76
More mention the nature of the doctor-patient relationship as a disadvantage in an Armed Forces career	24	17
	(271)	(770)

The evidence indicates that the "general practitioner" is oriented more than others toward concern about doctor-patient relationships, and that those who plan to specialize some or to take a residency are oriented more toward the "intellectual" aspects of medicine: science or research or teaching, challenging diagnostic problems, prestige within the profession, and a concern about regimentation and limitation of the individual.

The "general practitioners" do not differ materially from others on any of these points:

- the proportions at least "somewhat interested" in working as a physician, at least for a while, in any one of the Federal medical agencies
- the proportions saying the Army offers equal or better opportunity than civilian life for American Specialty Board certification, or the opportunity to utilize one's special training and skills
- the proportions saying that medical officers in the Armed Forces have contributed "a great deal" to medical science

The two types of students--those who plan a general practice and those who plan to take a residency or to specialize to some extent--differ more in their responses about certain aspects of medicine as a career than they do in their reactions about Federal or Armed Forces medicine. The findings suggest that there are sufficient differences between the "specialists" and the "general practitioners" to warrant somewhat different types of appeals in Armed Forces recruitment efforts directed toward the two groups.

Preferred medical specialty: internal medicine, named by 30 per cent of the students, is the outstanding preference in specialties (see Table 9). Surgery is second. Pediatrics, obstetrics and gynecology, and psychiatry and neurology follow, in order of popularity. *

There is little variation in the choice of specialties from class to class, although internal medicine and obstetrics are slightly more popular with seniors than with freshmen.

There is much less consensus on the medical specialty liked least, no one field being named by more than 13 per cent. Psychiatry and neurology, dermatology (included among "other" specialties in Table 11), pathology, and surgery were cited by 11 to 13 per cent. One out of every seven students specified one of the minor medical specialties (anaesthesiology, geriatrics, proctology, radiology, or urology) as the field he would like the least.

* Reporting on third and fourth year medical students from Western Reserve, Cornell, and Pennsylvania, Merton finds the same rank ordering of medical specialties based on "student conceptions of the relative prestige granted by the profession at large to the various specialties." (Robert K. Merton, Samuel Bloom, and Natalie Rogoff, "Studies in the Sociology of Medical Education," Journal of Medical Education, XXXI [August, 1956], 563-4.)

TABLE 11

"If you were to specialize in your practice--

- What field of specialization do you think you would prefer most?
- What field of specialization do you think you would like least?"

	<u>Prefer most *</u>	<u>Like least</u>
Internal medicine	30%	1%
Surgery	22	11
Pediatrics	10	5
Obstetrics and gynecology	10	7
Psychiatry and/or neurology	8	13
Orthopedics	2	3
Pathology	2	11
Ophthalmology	1	4
Otolaryngology	*	5
Public health or preventive medicine	*	6
Other specialties	5	27
Have no idea; can't make choice	10	7
No answer	<u>-</u>	<u>*</u>
	100%	100%

The variety of reasons for preferring a particular medical specialty are presented in Table 12 for the five specialties preferred by more than two per cent of medical students. Mentioned most often are the intellectual challenge and the learning opportunity provided by the specialty, attractiveness of the subject matter or objectives of the field, the quickness or certainty of results, the comprehensiveness of the field, the type of patient to be treated, and the nature of the practitioner's relationship to the patient.

* The 617 students who say they plan to take a residency after finishing their internship expressed preferences in a specialty that varied only slightly from the preferences of all students. The specialties preferred by those who plan to take a residency are: 30 per cent, internal medicine; 24 per cent, surgery; 8 per cent each, pediatrics, obstetrics and gynecology, psychiatry and neurology; 3 per cent each, orthopedics and pathology; 5 per cent, other specialties. Eleven per cent of students saying they planned to take a residency were unable to express a preference among the various specialties.

TABLE 12

"What are your main reasons for preferring (name of specialty) rather than some other field?"

	All stating prefer- ence	Int. med- icine	Sur- gery	Pedi- at- rics	Ob. and gyn.	Psych. and neur.
Intellectual challenge, stimulation, learning opportunity	33%	54%	25%	11%	13%	54%
Subject-matter, objectives	24	29	21	13	28	46
Quickness or certainty of results	18	4	48	26	18	5
Breadth, comprehensiveness of the specialty	16	40	5	11	9	5
Type of patient	14	3	2	82	36	6
Personal contact, doctor-patient relationship	14	22	3	7	23	33
Own personal characteristics, suitability	13	3	39	2	5	16
Emotional, psychological returns to the doctor	11	4	16	19	28	8
Favorable school or training experience	9	4	14	7	17	9
Tangible rewards--pay, hours, chances for advancement	4	2	6	1	1	9
Miscellaneous reasons	13	7	12	9	23	21
Don't know, no answer	2	1	3	1	3	2
Some mention more than one reason	171%	173%	194%	189%	204%	214%

(973) (329) (235) (103) (105) (85)

The reasons students offer for liking some specialty least (see Table 13) are, in general, the opposite of the reasons they give for preferring another specialty--that the specialty liked-least lacks intellectual challenge, is uncongenial in subject-matter or objectives, affords little personal contact with patients, offers slow or uncertain cures, or is too narrow.

TABLE 13

"What are your main reasons for liking (name of specialty) least?"

	<u>All stating preference</u>	<u>Psych. and neurology</u>	<u>Dermatology</u>	<u>Surgery</u>	<u>Pathology</u>	<u>Obst. and gyn.</u>	<u>Public health, preven. med.</u>
Lack of intellectual challenge, stimulation, research opportunity	24%	18%	44%	32%	10%	33%	18%
Subject-matter, objectives of the specialty uncongenial	22	21	26	14	27	17	27
Lack of personal contact, poor doctor-patient relationship	22	1	4	20	83	1	56
Slowness or uncertainty of cures	16	47	47	9	2	-	2
Narrowness of the specialty.	11	6	15	5	4	18	-
Personally unsuited or personal objections.	9	11	4	32	4	3	2
Type of patient.	8	10	2	10	3	21	3
Unfavorable school or training experience.	5	6	3	5	2	9	16
Unpleasant emotional states, physical strain on doctor	4	6	-	12	-	3	-
Poor pay, long or irregular hours, poor chance of advancement.	3	-	-	3	1	26	5
Miscellaneous.	9	12	4	16	4	8	19
Don't know, no answer.	<u>5</u>	<u>5</u>	<u>7</u>	<u>2</u>	<u>1</u>	<u>13</u>	<u>2</u>
Some mention more than one	138%	143%	156%	160%	141%	152%	150%
	(1006)	(146)	(133)	(121)	(115)	(76)	(62)

5. Income Expectations

Today's medical students have high expectations for their future earnings from medicine:

Only 13 per cent estimate their net incomes ten years after graduation from medical school will be less than \$10,000; the median estimate of net income ten years after graduation is \$14,580.

Students' estimates of the net income of the "average general practitioner" ten years out of school are somewhat lower than their estimates of their own incomes. Their median estimate of the average GP's net income after ten years is \$14,010. One-third of the medical students estimate that their own incomes would be higher than their conceptions of the average GP's earnings after ten years, 46 per cent estimate their incomes would be about the same, and only 21 per cent guess that their income would be less.

Estimates of net income at the height-of-career have a median of \$22,340, with only one per cent of the medical students anticipating a height-of-career income of less than \$10,000.

Table 14 presents these three kinds of income estimates as made by students in the various years of medical school, and by those who plan to be general practitioners compared with those who plan to specialize.

Student expectations of earnings vary according to whether they plan a general practice or to specialize at least to some extent. Among students expecting to go into general practice, 22 per cent feel their income ten years out of medical school will be higher than the income they estimate the "average general practitioner" makes at a comparable point in his career, while 38 per cent of those who plan to specialize expect to be making more money ten years out of school than they think the "average general practitioner" makes ten years after graduation. It is suspected that there would be an even greater differential in expected earnings between those planning a general practice and those planning to specialize were it not that some of the intended specialists took into account the fact that, because of the additional years of training specialization entails, they would have fewer years of actual practice within ten years of graduation.

TABLE 14

"Here is a range of net yearly incomes, after deducting professional expenses.

"Speaking realistically, which one of these groups represents your guess as to the net income you yourself will be making ten years after you graduate from medical school?

"Which one of these groups represents your estimate of the net income of the average general practitioner, ten years out of medical school?

"Which one of these groups represents your estimate of the net income you would hope to have at the height of your career?"

	Net income 10 years after medical school		Hope to have at eight of career
	Self	Av. GP	
Under \$5,000	1%	1%	*%
\$5,000 to \$9,999	12	11	1
\$10,000 to \$14,999	38	47	13
\$15,000 to \$19,999	27	25	24
\$20,000 to \$24,999	13	11	24
\$25,000 to \$29,999	4	3	15
\$30,000 to \$34,999	2	1	10
\$35,000 to \$39,999	1	*	3
\$40,000 or more	1	*	8
Can't guess; no answer	<u>1</u>	<u>1</u>	<u>2</u>
	100%	100%	100%

Median Estimates:

All students	(1086)	\$14,580	\$14,010	\$22,340
Freshmen	(286)	14,440	13,870	21,310
Sophomores	(280)	14,140	13,580	22,010
Juniors	(271)	15,070	13,840	22,870
Seniors	(249)	16,230	14,990	23,420
Plan a general practice	(271)	14,050	14,020	20,170
Plan to specialize to some extent or take a residency	(770)	15,280	13,970	23,060

Hopes for net incomes at the height-of-career run about 50 per cent greater than the incomes expected ten years out of school.

Students' estimates of their incomes ten years after graduation from medical school may be fairly realistic ones, as indicated by figures from a recent NORC study* and from statistics on medical incomes from American Medical Association sources.** On the other hand, the general expectation that net income will be 50 per cent greater at the height-of-career seems overly optimistic. It is of interest to note that the income estimates of seniors, presumably better-informed than lower-classmen about the actual earnings of doctors, are slightly higher than those of lower classmen.

SUMMARY: Medical students express a high degree of satisfaction with the profession they have chosen, and with their prospects for the future.

Service, personal contacts, challenge and variety in work, personal and professional independence, and financial reward are valued highly. Hours of work are considered of much less importance.

Almost nine out of ten prefer private individual or group practice, and seven out of ten expect to be able to practice in the way they prefer.

More than nine out of ten reject salaried medicine as a career goal, and two out of three specify public medicine as the kind they like least.

One in four plans a general practice, while seven out of ten seek full or partial specialization. The preferred specialties are internal medicine and surgery. Pediatrics, obstetrics and gynecology, and psychiatry and neurology are next in preference.

Even in the freshmen year, the preponderant majority of students indicate a choice for type of practice and medical specialty. Such choices are subject to some change with progress through school.

* This study, conducted in the summer of 1955 and based on a sample of doctors mentioned as their "regular doctor" by a sample of the general public, found such physicians reporting an annual average net income of \$15,350.

** The Bureau of Medical Economic Research, American Medical Association, on the basis of as-yet-unpublished Department of Commerce figures, gives the 1955 average net income (after allowance for business expenses but before taxes) of physicians as \$14,500.

Medical students anticipate an average net income in excess of \$11,000 ten years after graduation. Eight out of ten feel that financially they will be doing as well or better than the average general practitioner does ten years out of school. At the height of their careers, they hope for an average net income in excess of \$22,000.

B. ATTITUDES TOWARD FEDERAL AND MILITARY MEDICINE

1. Short-Term Governmental Work

To most American medical students, a medical career is virtually synonymous with private practice. As reported in the last section, 87 per cent prefer a career in some type of private practice. Only one out of a hundred students spontaneously names any form of public medicine as the type of long-term medical career he prefers.*

Even when they are asked directly about their interest in working as a physician "at least for a while" in each of the five Federal medical agencies (Army, Navy, Air Force, U. S. Public Health Service, Veterans Administration), only one of these services (Air Force) draws "Very interested" responses from as many as 11 per cent of the students. However, substantial numbers report being at least "Somewhat interested" (See Table 15).

TABLE 15

"How interested are you in working as a physician, at least for a while ...-- very interested, somewhat interested, or not at all interested?"

	<u>Very</u>	<u>Some-</u> <u>what</u>	<u>Not at</u> <u>all</u>	<u>No opin.,</u> <u>No ans.</u>	<u>Total</u>
-- As an officer in the Air Force Medical Service?	11%	39%	49%	1%	100%
-- As an officer in the Navy Medical Service?	10	37	52	1	100%
-- As an officer in the Army Medical Service?	8	37	54	1	100%
-- In the U. S. Public Health Service?	5	33	59	3	100%
-- In the Veterans Administration?	4	34	58	4	100%

* The low regard with which students view public medicine is paralleled by fairly similar attitudes among the general public. Janowitz and Wright, reporting on a recent study in Detroit, find the general public according higher prestige today compared with 25 years ago to several occupations in the municipal government. The outstanding exception to their general finding is the low esteem in which the doctor in government service is held compared to his colleague in private employment. (Morris Janowitz and Deil Wright, "The Prestige of Public Employment: 1929 and 1954," Public Administration Review, XVI Winter, 1956/7, 15-21.)

The proportion saying they are at least "Somewhat interested" in working at least for a while in one of these Federal medical programs ranges from 50 per cent for the Air Force to 38 per cent for the USPHS and VA. As summarized in Table 16, appreciably fewer seniors than freshmen express interest in the Navy, USPHS, or VA, while the proportions indicating interest in Army and Air Force remain the same for the four years.

TABLE 16

Per Cent "Very Interested" or "Somewhat Interested"
in Short-term Work in Federal Government

<u>Federal Medical Agency</u>	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Air Force	50%	53%	48%	48%	51%
Navy	47	55	48	45	39
Army	45	46	46	43	47
USPHS	38	47	38	35	31
VA	38	41	39	38	33

2. A Long-Term Governmental Career

When asked to choose among the five Federal medical agencies--to assume for the moment that their choice of medical careers would be limited to one of the Federal agencies--96 per cent indicate a preference. The two civilian agencies--the U. S. Public Health Service and the Veterans Administration--are chosen somewhat more frequently than the medical services of the individual Armed Forces. (See Table 17)

TABLE 17

"If you were going to make your career in a Federal medical activity, which one would you prefer most:....? Which one would you prefer least?"

	<u>Prefer most</u>	<u>Prefer least</u>
USPHS	23%	31%
VA	22	21
Navy	20	12
Air Force	19	4
Army	12	23
No preference	<u>4</u>	<u>9</u>
	100%	100%

The chief differences in the preferences of students in the four classes of medical school are that the Army is preferred by relatively more seniors (17 per cent) than freshmen (ten per cent), and that fewer seniors (17 per cent) than freshmen (22 per cent) prefer the Navy. Correspondingly, fewer seniors than freshmen name the Army as the medical career they would like the least and more seniors than freshmen name the Navy as the career they would like the least. It is not known whether these differences reflect primarily the effects of changes in preferences during the course of medical school, or are primarily attributable to differences in the backgrounds of the men who currently make up the freshman and senior classes.

Some distinctions between short-term and long-term career preferences are apparent. (See Figure 2, presented earlier.) While each of the three Armed Forces medical services are preferred by more students for a short-term appointment than are the USPHS and the VA, either the USPHS or VA is preferred by more students for a long-term career than the individual Armed Forces medical services are. In part, these differences in preferences on a short-term or long-term basis may reflect actual differences in the advantages perceived by students considering the several agencies from short-term or long-term standpoints. It is suspected that an even more important influence on the relatively higher ranking of the individual Armed Forces in terms of short-term service is the factor of obligation for military duty. Students who know they are likely to be called upon for two years' duty in one of the Armed Forces may be inclined to make (or to simulate) an anticipatory adjustment to Armed Forces duty by saying that, since they are going to be on active duty for two years anyhow, they had better express some interest in such duty. Further, some may have stated a short-term interest in one of the Armed Forces because they were aware that Veterans Administration duty does not count toward the current two-year service requirement or were unaware that USPHS duty does.

Reasons for career preferences among the various Federal services are presented in Table 18. Cited most frequently are: interest in the agency's problems or objectives or opportunities, the quality of medical facilities available, and the resemblance to private or civilian practice.

TABLE 18

"Why would you prefer (name of Federal medical activity preferred) most?"

	All stating prefer- ence	VA	USPHS	Army	Navy	Air Force
Problems, objectives, research interest, or opportunities congenial to student.	24%	13%	56%	6%	5%	33%
Quality of medical facilities, plant, staff, or care given	23	27	4	35	38	20
Resemblance to private or civilian practice	21	50	34	7	1	8
Variety of case material.	13	21	17	13	6	7
Pay, quarters, work hours	11	7	2	13	16	21
Own personal experiences of student	10	8	3	17	16	11
Teaching or learning facilities beneficial to doctor.	9	14	6	12	8	6
Relative permanence of assignment	7	16	5	8	*	8
Experiences of friends, relatives	6	2	2	4	16	9
Miscellaneous	21	6	13	26	33	39
Don't know, no answer	4	1	3	9	10	3
Some mention more than one	149%	165%	145%	150%	149%	165%
	(1047)	(244)	(251)	(127)	(219)	(206)

The three or four principal reasons offered by the students for preferring one of the five agencies are as follows:

The VA:

Resemblance to private or civilian practice	50%
Quality of facilities, staff, medical care	27
Variety of case material	21

The USPHS:

Problems, objectives, research or other opportunities	56%
Resemblance to private or civilian practice	34
Variety of case material	17

The Navy:

Quality of facilities, staff, medical care	38%
Own personal experiences of the student	16
Experiences of friends, relatives	16
Pay, quarters, work hours	16

The Air Force:

Problems, objectives, research or other opportunities	33%
Pay, quarters, work hours	21
Quality of facilities, staff, medical care	20

The Army:

Quality of facilities, staff, medical care	35%
Own personal experiences of the student	17
Variety of case material	13
Pay, quarters, work hours	13

Reasons for singling out one of the five agencies as liked least for a career appear in Table 19. The two most frequent objections are: bureaucratic regimentation and lack of freedom, and the uncongeniality of the agency's problems or objectives.

TABLE 19

"Why would you prefer (name of Federal medical activity) least?"

	All stating prefer- ence	VA	USPHS	Army	Navy	Air Force
Bureaucratic regimentation, lack of freedom -- other than lack of choice of assignment.	22%	24%	15%	43%	12%	14%
Problems, objectives uncongenial to student.	21	23	48	2	2	7
Poor quality of doctor-patient relationship.	13	18	25	6	2	4
Lack of variety in case material.	12	22	5	14	19	14
Poorer or different quality of medical facilities, plant, staff, or care given	12	15	9	16	5	34
Limitation on choice of location of practice	11	3	2	14	53	11
Own personal experience of student	5	5	2	10	6	4
General disapproval of govern- ment in medicine.	2	7	1	*	-	-
Miscellaneous	19	16	18	22	36	25
Don't know, no answer	10	10	12	16	3	11
Some mention more than one	127%	143%	137%	143%	138%	124%
	(987)	(234)	(337)	(247)	(125)	(44)

The three or four main reasons for liking least the various agencies specified are:

The VA:

Bureaucratic regimentation, lack of freedom	24%
Problems, objectives uncongenial to student	23
Lack of variety in case material	22
Poor quality of doctor-patient relationship	18

The USPHS:

Problems, objectives uncongenial to student	48%
Poor quality of doctor-patient relationship	25
Bureaucratic regimentation, lack of freedom	15

The Navy:

Limitation on choice of location	53%
Lack of variety in case material	19
Bureaucratic regimentation, lack of freedom	12

The Air Force:

Quality of facilities, staff, medical care	34%
Bureaucratic regimentation, lack of freedom	14
Lack of variety in case material	14

The Army:

Bureaucratic regimentation, lack of freedom	43%
Quality of facilities, staff, medical care	16
Lack of variety in case material	14
Limitation on choice of location	14

As was pointed out earlier, careers in general and in the Armed Forces in particular are believed to present a mixture of advantages and disadvantages, and a student's choice represents his estimate of the most desirable reconciliation of these conflicting demands and his own goals.

Attractions of the Army, Navy, and Air Force medical branches: Each of the Armed Forces medical branches has one outstanding attraction for students preferring them as long-term careers. Army and Navy, long-established corps, are pre-eminent in student thinking for the caliber of their physical facilities, professional staff, and quality of medical care. Aero-medical research, air physiology, and allied problems represent the prime attraction for an Air Force medical career.

With the exception of this one outstanding feature, student conceptions of the three armed services are fairly similar. In greater or lesser degree Army, Navy, and Air Force are each thought to offer the practitioner varied working materials, the opportunity to broaden his medical knowledge, a congenial atmosphere in which to work, and adequate financial return.

Career attractions unique to one or another of the three branches are few. Air medicine and Air medical research represent an attraction peculiar to the Air Force. Relative length of assignment in the Army and Air Force compared to the Navy represents a second.

There is even more consensus among students on the question of drawbacks or disadvantages career-wise in each of the three services. Thus the feeling is widespread that the Army doctor is severely limited in his professional activities. Similarly, the most frequent objection to a Navy medical career is in terms of location of practice, fear of a ship-board practice; and the recently independent Air Force medical branch is thought to be poor in the quality of its physical plant and staff. Each of these criticisms is made for the remaining two Armed Forces as well, but with much less frequency.

The fact that the Army is singled out for criticism on the grounds of "bureaucratic regimentation, lack of freedom" three times as often as the other two services are, leads to the inference that in many instances the word "Army" elicits a generic negative stereotype among medical students in which "the Army" is more immediately associated than the other services with the image of Selective Service and the drafting of doctors---even though all three services obtain officers through the "Doctor Draft." Conceptions about the drawbacks or disadvantages in a career in one of the Armed Forces seem to be based rather frequently on stereotyped notions or hearsay. This inference is drawn from the relatively high proportion of students unable to give reasons either for or against their choices among the Armed Forces, coupled with the concentration of responses within relatively few categories, and the general indication that relatively few students have given much prior consideration to long-term careers in the Armed Forces. Such stereotypes about the nature of Armed Forces medicine can be a serious handicap to Armed Forces procurement efforts, for if men act upon stereotypes as though they are real, the consequences can be very real.

At least a tenth of those picking either the Army, Navy, or Air Force as a career do so in the light of first-hand knowledge of the Service or on the basis of the experience of friends and relatives. Factors of prior personal experience and the influence of friends and relatives, serving to confirm or dispel existing conceptions of Armed Forces medical careers, are important ones and will be presented in greater detail in Section E.

The student's choice of one of the Armed Forces, if he were to have a career in a Federal medical activity, is related to whether he looks forward to an individual practice, a group practice, or a salaried practice. (See Table 20.) Slightly more of those anticipating a group practice than those planning any other type of practice choose the Army, and the highest proportion of those choosing the Navy is found among those planning an individual practice with pooled facilities.

TABLE 20

Preference Among Federal Medical Activities Among Those Preferring Various Types of Medical Practice

<u>Preferred Federal medical activity</u>	<u>Indiv. prac.</u>	<u>Indiv. prac., pooled facil.</u>	<u>Group practice</u>	<u>Public, private salaried practice</u>
VA	21%	21%	27%	13%
USPHS	22	18	25	34
Army	11	11	14	2
Navy	18	27	17	17
Air Force	22	21	14	32
No choice	6	2	3	2
	—	—	—	—
	100%	100%	100%	100%
	(285)	(337)	(320)	(47)

These career preferences are not only informative in their own right, but serve to substantiate the data on the advantages of the three Armed Forces. For instance, the Army, best known for its working facilities and staff, is picked most frequently by the group concerned with practice facilities and least often by those with a problem- or research-orientation, the "salaried practitioners." The opposite prevails in the case of the Air Force.

3. Specific Aspects of Military Medicine

Although medical students regard military medicine unfavorably in many respects, their attitudes toward military medicine and a military career are characterized by some ambivalence. As an illustration, on the one hand they have a favorable opinion of the contributions which Armed Forces medicine has made to medical science; on the other hand, they hold rather unfavorable opinions of those doctors who serve in the Armed Forces and who are the source of those contributions to medical science.

Contributions to medical science: only five per cent express the opinion that the Armed Forces have contributed "little or nothing" to medical science:

TABLE 21

"How much would you say medical officers in the Armed Forces have contributed to medical science--a great deal, a moderate amount, or little or nothing?"

A great deal	41%
A moderate amount	52
Little or nothing	5
No opinion; no answer	2

100%

Armed Forces career Medical Officers are seen by 59 per cent of the medical students as tending to be "different from civilian physicians" in certain ways. This feeling is more prevalent among seniors (66 per cent) than among freshmen (54 per cent).

The ways in which physicians who choose to spend their careers as Medical Officers in the Armed Forces tend to be different are presented in Table 22. Most of the imputed "differences" are negative in tone. The chief stereotypes reported by those who feel there are differences: military doctors are less interested in their patients or in medicine than civilian doctors are; they are emotionally insecure; or they are lazy and lack industry.

TABLE 22

"In what ways do you feel that they (physicians who choose to spend their careers as Medical Officers in the Armed Forces) might be different from civilian physicians?"

No differences at all.	41%
Less interested in patients or in medicine than civilian doctors	21
Emotionally insecure, inadequate	15
Lazy, less industrious than civilian doctors	14
Desire for financial security.	8
Need for security, unspecified as financial or emotional	4
Miscellaneous qualities considered undesirable	17
Miscellaneous qualities not necessarily considered undesirable	7
No consistent differences: an individual matter or consequence of the work situation.	3
Don't know: no answer.	1
	—
Some mention more than one	131%

(1086)

Personal advantages in a military career: today's medical students seem well aware of those aspects of a military medical career which have been most widely publicized as advantages. Asked about the advantages of a career for themselves as a Medical Officer in the Armed Forces compared to a civilian career, responses (see Table 23) fall into five main categories: advantages of pay and economic security, hours of work, retirement provisions, the quality of facilities, and lessened responsibility or worry.

The advantages cited by students are presented in Table 23 for all students and separately for those who express at least some interest in working as a physician in one of the Armed Forces "at least for a while" and students indicating no such interest.

TABLE 23

"What would be the outstanding advantages of your having a career as a Medical Officer in the Armed Forces, compared to your being a physician in civilian life?"

	Total	Interest in Armed Forces "at least for a while"	
		Some interest	No interest
Economic security or pay, <u>generally</u> . . .	42%	42%	42%
Good starting pay, pay in <u>early</u> years . . .	9	10	7
Shorter, more regular hours	36	39	30
Retirement provisions, pension.	19	21	17
Good facilities, equipment, staff, program, with emphasis on benefits to doctor.	18	20	13
Good facilities, equipment, staff, program, with chief beneficiary unspecified	8	8	7
Good facilities, equipment, staff, program, with emphasis on benefits to patients	4	5	3
Practice already set up or assured.	10	9	12
Less responsibility or worry than in civilian practice	8	7	11
Miscellaneous	18	21	13
<u>No</u> advantages, specifically stated.	20	16	26
Don't know; no answer	1	1	2
	<hr/>	<hr/>	<hr/>
Some mention more than one	193%	199%	183%
	(1086)	(687)	(399)

Although medical students can and do cite a number of features of Armed Forces medicine which are advantageous in comparison with civilian life, a fifth of the total group explicitly find no advantages whatever in such a career. In addition, when responses to this question are compared with the earlier data on stereotyped notions about Armed Forces doctors, or the relative importance of certain components of a medical career, or income expectations, it is apparent that not everything reported as an advantage is really conceived to be one. The fact that the Armed Forces offer economic security and a retirement system must be balanced against derogatory opinions of Armed Forces doctors, who, in the students' eyes, "simply seek economic security in the military," and against the students' own earning expectations. The suggestion that the Armed Forces offer shorter, more regular hours of work must be juxtaposed against the relative unimportance attached to hours of work and the idea that military physicians are lazy and lacking in industry. The idea that the Armed Forces permit the doctor a less worrisome practice must be compared with the feeling that Armed Forces physicians are less interested in their patients or in medicine than civilians or, by implication, than doctors should be.

Advantages of a military career are cited in about the same relative order by those who express at least some interest in Armed Forces medical work, and those who express no such interest. Differences between the two groups are largely attributable to the fact that those who express some interest can think of more advantages. One finding which may be of some importance is that those with some interest in Armed Forces medical work "at least for a while" are more likely to mention as an advantage the good facilities, equipment, staff, and program available in Armed Forces medicine.

Disadvantages in a military career: regimentation and limitation of the individual physician is most often mentioned by medical students. This criticism seems to be an almost automatic reaction to the suggestion of a career in the Armed Forces, since it is mentioned by about three-fourths of the students in all four classes of medical school. Other disadvantages, mentioned by one-fifth or more of the students, include: adverse effects on family or personal life; poorer quality of facilities or program or case material; and lower pay than civilian practice.

Although a fifth of the total group can't name any advantages in an Armed Forces career, virtually all students can name disadvantages. The various presumed disadvantages are listed in Table 24, for all students and separately for those who do, or do not, express at least some interest in work as an Armed Forces physician "at least for a while."

The only noteworthy difference in the disadvantages cited by the two groups is that more of those who express some interest in a tour of duty in Armed Forces medicine mention the possible adverse effects on family or personal life. This difference may be interpreted as reflecting a tendency, among those who expect to have a tour of duty in the Armed Forces, to give more thought to personal deprivations that might be involved in military service.

TABLE 24

"What would be the outstanding disadvantage of your having a career as a Medical Officer in the Armed Forces, compared to your being a physician in civilian life?"

	Interest in Armed Forces "at least for a while"		
	<u>Total</u>	<u>Some interest</u>	<u>No interest</u>
Regimentation, limitation of the individual.	74%	73%	75%
Adverse effects on family or personal life.	30	32	25
Poorer quality or kind of facilities, program, type of case material . .	24	23	26
Lower pay than civilian practice. . .	21	23	19
Nature of the doctor-patient relationship.	19	19	18
Adverse effect on character, competence of doctor.	12	12	13
Limitation of professional opportunity	9	8	10
Adverse effect on own private practice	4	3	4
Miscellaneous	6	6	5
<u>No</u> disadvantages, specifically stated	*	*	1
Don't know; no answer	1	1	1
	—	—	—
Some mention more than one	200%	200%	197%
	(1086)	(687)	(399)

Relative opportunities for specialization and training: a majority of students say:

--that a physician would have a greater opportunity to qualify for Board certification in a specialty in civilian life than in the Army

--that the student would have a better chance to utilize his special training and skills in civilian life; and that

--if the student were an Army physician, he would not have a sufficient variety of cases to meet his professional needs.

Detailed findings on these three questions appear in Table 25. Differences by class-in-school are not great. More seniors (31 per cent) than freshmen (18 per cent) say there is "no real difference" between the Army and civilian life in the opportunities to qualify for Board certification; and more seniors (42 per cent) than freshmen (34 per cent) say that as an Army physician they would have a sufficient variety of cases to meet their own professional needs.

TABLE 25

"Where do you think a physician would have a greater opportunity to qualify for certification by one of the American Specialty Boards-- in the Army, or in civilian life?"

In the Army	13%
In civilian life	54
No real difference	22
No opinion	<u>11</u>

100%

"Where do you think you would have a better chance to utilize your special training and skills--as an Army physician, or as a civilian physician?"

As an Army physician	5%
As a civilian physician	82
No real difference	11
No opinion	<u>2</u>

100%

"If you were an Army physician, do you think you would, or would not, have a sufficient variety of cases to meet your professional needs?"

Would have sufficient variety	39%
Would not	51
Depends on place of assignment, whether one is a GP or a specialist	6
No opinion	<u>4</u>

100%

Army patient care is viewed rather favorably by medical students, seven out of ten of whom voice the opinion that Army hospital care is no different or even better than the same patients would get in civilian hospitals. Two-thirds of the students express the view that Army doctors are more closely supervised than their civilian counterparts. (See Table 26)

TABLE 26

"Do you think the patients in Army hospitals generally get better, or poorer, medical care than the same patients would get in civilian hospitals?"

Generally better in Army hospitals	26%
Generally poorer in Army hospitals	21
There would be no real difference	44
No opinion	9
	—
	100%

"Generally, do you feel that Army doctors are more closely, or less closely, supervised than civilian doctors in the way they treat their patients?"

More closely supervised in Army	63%
Less closely supervised in Army	14
There is little difference	14
No opinion	9
	—
	100%

A follow-up question, "Do you think this closer, or less close, supervision in the Army generally works to the advantage or disadvantage of patients in the Army?", results in the finding that a third of the total student group feels that Army doctors are more closely supervised and that this is beneficial to the patients, while one-sixth think that doctors are more closely supervised but that this is to the patient's disadvantage--primarily because the supervision would lead to a division of responsibility for the patient's welfare. Of the relatively small proportion (14 per cent) saying they think supervision is relatively less close in the Army, two-thirds consider this to operate to the Army patient's detriment.

The general consensus, then, appears to be that there is more supervision over patient care given by Army doctors than obtains in civilian medical practice, and the students tend to approve of more supervision--for Army doctors. The results do not necessarily lend themselves to the interpretation that these medical students would seek much supervision in their own practices; for it was shown earlier that a majority would prefer some type of individual practice.

Civilian medicine is preferred by almost all students, even though many concede there are certain advantages to a military medical career. In answer to the question, "Suppose your net income from civilian and military medical work were absolutely the same, which would you prefer?", 97 per cent say they would prefer civilian medicine.*

Military medical income of those in the higher ranks tends to be underestimated. The question, "At the present time, what would you guess is the approximate total monthly pay and allowances of an Army Medical Corps Colonel with 30 years' service?" finds 41 per cent naming the income bracket (\$1,000 to \$1,299 per month) that contains the correct figure of \$1245.88.** One-third (32 per cent) name a lower figure, 19 per cent a higher amount, and eight per cent do not guess.

It appears doubtful whether any campaign to acquaint medical students with the facts regarding the top potential military medical income would in itself materially increase their interest in military medicine as a career. Earlier it was noted that the median income which medical students hope to have at the height of their careers is \$22,340, and even the median expected income only ten years out of medical school (\$11,580) compares favorably with the income they might aspire to at the height of a military medical career.

4. Sources of Impressions about Army Medicine

Students get their impressions about Army medicine from a variety of sources--their own experiences and the experiences of friends and relatives, some of whom are or were doctors in service, from fellow students, from the medical school faculty, from Army medical officers, and from other doctors. As far as first-hand experience is concerned, one-sixth have been on active duty in one of the Armed Forces: eight per cent have served in the Army, and three per cent specifically in the Army Medical Corps. One-fifth of the medical students have a close living relative who is, or was, in the Army Medical Service; and half have a close living relative who is, or was, in some other branch of the Army.

Specific inquiry about nine different sources of impressions about Army medicine reveals considerable variation both in the amount of contact students evidently have with these various sources, and in the impressions gained from them. The results are summarized in Table 27.

* Another question, providing some indirect indication of students' attitudes toward having an Armed Forces career, was asked of the 35 per cent of students who are married: "What do you think your wife's attitude would be toward your having a career as a Medical Officer in the Armed Forces--favorable, or unfavorable?" Seventy-one per cent of the married students answered "unfavorable," 16 per cent "rather neutral," and 12 per cent "favorable."

** There was an increase in pay during the course of the survey; \$1245.88 represents the correct figure for the bulk of the interviewing period.

TABLE 27

"Now, please think for a moment about where you might have picked up impressions about Army medicine:

"Did you get any impression about Army medicine from (name of each potential source)?

"Did you get a generally favorable, or generally unfavorable, impression of Army medicine from that source?"

<u>Source of impression</u>	Per cent getting impression from source mentioned	Impression from that source was generally			Total getting impression
		Favorable	Mixed	Unfavorable	
Medical students	59%	15%	40%	45%	100% (630)
Other physicians you have known /Other than specified below/	55	18	34	48	100 (595)
Medical school faculty members	41	26	34	40	100 (443)
Other relatives who were in service /Other than specified below/	40	24	29	47	100 (435)
Regular Army Medical Corps officers	35	57	20	23	100 (381)
Reserve officers on duty with the Army Medical Service	32	50	19	31	100 (346)
Relatives who are or were doctors in service	19	22	32	46	100 (201)
Your own military service	18	23	27	50	100 (198)
Other relatives who are or were doctors	12	20	29	51	100 (120)

The most commonly cited sources of impressions about Army medicine are the medical students' own peers (fellow medical students), physicians who were not relatives, medical school faculty members, and relatives who were in military service but not as doctors.

The only sources cited as favorable to Army medicine by a plurality of students who recalled picking up impressions from these sources are Army sources: Regular or Reserve officers on duty with the Army Medical Service. No other sources of impressions left favorable impressions with more than a quarter of the students who had contact with them.

In interpreting these findings, it must be remembered that the question was put in terms of the impressions gained by students from the various sources. The student's own prior attitudes and actions may have had a pronounced effect on the impressions he gained; consequently, the findings do not necessarily reflect the favorableness or unfavorableness toward Army medicine of the various sources. Some of the ways in which the student can affect the communication process include the following:

A student may have such strong pre-existing attitudes toward the Army that he remembers only such communications about the Army as are consistent with these attitudes.

A student who has strong attitudes toward the Army may seek out confirmations of his attitudes by tending to discuss Army medicine only with those whom he presumes to have the same attitudes. Further, if the student makes his attitudes known, others who do not share his views will tend to avoid the subject of the Army in talking to him.

The impression of the Army gained by the student may be colored by his respect or lack of it for the source of the information. Communications from respected sources may be better-remembered than other communications.

Some communications will be colored by the context in which they are offered. One instance would be when a medical school faculty member takes a position favorable to Army medicine in an atmosphere which has been generally unfavorable to it, or after the student had arrived at the opinion that the faculty member was unfavorably inclined toward it.

It is likely that impressions from Army Medical Corps officers tend to be the impressions derived by students who express some interest in an Army career, and thus seek out such officers to discuss Army medical programs.

In any case, these possible interpretations of the findings do not negate the findings themselves: the fact remains that many more medical students were left with unfavorable than with favorable impressions of Army medicine from their contacts with certain groups. The particular groups that appear to be especially involved in unfavorable communications with medical students about Army medicine are: fellow medical students, physicians outside the Army, and medical school faculty members. It would seem that increasing the favorableness of communications with medical students about Army medicine would be dependent in large measure upon obtaining the cooperation of these three groups.

SUMMARY: Only one student in a hundred spontaneously names some Federal medical agency as the type of long-term medical career he prefers.

While the three Armed Forces tend to be preferred for work that might be temporary, either of the civilian Federal agencies (VA, USPHS) tend to be preferred over the individual Armed Forces if the student were to make his long-term career in a Federal medical activity.

The chief reasons given for preferring one of the Federal agencies rather than another are the student's interest in the agencies' objectives or the opportunities in the agency, the quality of medical facilities available, and the resemblance to private or civilian practice. The chief reasons offered for liking one of the Federal agencies least are the feeling that it is characterized by excessive bureaucracy or a lack of personal or professional freedom.

On specific aspects of military medicine, almost all students concede that the Armed Forces have contributed at least a moderate amount to medical science; and seven out of ten have the impression that Army hospital care is no different, or even better, than the same patients would get in civilian hospitals. However, on all questions about the medical students' own career preferences, civilian medicine is preferred to military.

The primary sources of impressions about Army medicine appear to be the medical students' own peers (other medical students), physicians they have known, and medical school faculty members. Except for Army sources (regular or reserve officers on duty with the Army Medical Service), the sources generally left the students with impressions of Army medicine that are more unfavorable than favorable. This finding does not necessarily mean that these impressions accurately reflect the attitudes and opinions of the sources to which they are attributed. As noted earlier, it may be that some students are so negative toward military medicine that they are highly selective in their impressions concerning Army medicine obtained from the various sources. In any event, it appears that improving communications with medical students about Army medicine will be heavily dependent upon obtaining the cooperation of these three groups: fellow medical students, physicians outside the Army Medical Service, and medical school faculty members.

C. OPINIONS OF FOUR MILITARY MEDICAL TRAINING PROGRAMS

One of the principal objectives of this study was to measure opinions and information regarding four military medical training programs: the Clinical Clerkships, the Senior Medical Student program, the Internships, and the Residencies.* Levels of information on these four programs are described in the next section. This section presents findings, for each of the four programs in turn, on the following points:

- Awareness of the program
- Advantages the student sees in the program for himself
- Disadvantages he sees in it for himself
- Suggestions for changes in the program
- Interest in participating in the program

For background, it should be noted that knowledge that these Armed Forces programs exist is fairly widespread. Only one student in a hundred says he is unfamiliar with all four programs; two-thirds indicate some degree of familiarity with all four. On the whole, freshmen are less familiar with the programs than seniors are. Expressions of interest in participating in the various programs range from 37 per cent for Army residencies to 64 per cent for Army Clinical Clerkships.

1. The Clinical Clerkship

- a. Awareness of the Program: four out of five students are aware of the fact that several of the Armed Forces offer Clinical Clerkships "during the summer between ... junior and senior years," but twice as many freshmen (32 per cent) as seniors (16 per cent) say that they have never heard of these clerkships.

TABLE 28

"Did you know that several of the Armed Forces offer Clinical Clerkships that medical students can hold during the summer between their junior and senior years?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Yes, knew there were such appts.	78%	67%	82%	85%	81%
Scheduled for one this summer (Jrs.); had one last summer (Srs.)	1	-	*	1	2
No, never knew of them before	20	32	17	14	16
May have heard of them; not sure	1	1	1	*	1
	100%	100%	100%	100%	100%
	(1086)	(286)	(280)	(271)	(249)

* Summaries of the principal features of these programs appear at the end of the Appendix.

- b. Advantages of the Clinical Clerkship: the principal advantage students see in their own possible participation in an Armed Forces Clinical Clerkship is the learning opportunity, whether it be to learn more medicine or to gain more experience in medicine in general, or to learn more about military medicine or military service. (See Table 29) Mentioned next most often is the pay. There is little variation from class to class in aspects of the Clinical Clerkships which are mentioned as advantageous; seniors, however, for whom military service is more imminent, mention more frequently than others the opportunity to learn about military medicine or military service. About one student in every three who knows of such clerkships reports either that the clerkships hold no advantages for him personally, or that his school schedule is such as to make impossible his participation in a summer program.

TABLE 29

"Would an Armed Forces summer Clinical Clerkship have any advantages for a medical student like you? What advantages?" (Asked only of those aware of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Specified program would have <u>no</u> advantages	25%	26%	24%	26%	23%
Advantages of --					
Opportunity to learn more medicine, gain more experience	38	41	35	38	39
Opportunity to learn about military medicine.	10	6	6	9	18
Opportunity to learn about military service	5	2	3	7	7
Opportunity to learn different things, or in a different setting.	4	4	2	3	6
Access to good facilities, good teachers.	4	2	3	6	5
Pay	28	26	34	24	27
Opportunity to work off draft obligation.	*	-	1	-	1
Miscellaneous	5	4	7	6	5
Don't know, no answer	6	9	5	3	6
School schedule precludes participation .	<u>11</u>	<u>7</u>	<u>16</u>	<u>12</u>	<u>9</u>
Some mention more than one	136%	127%	136%	134%	146%
	(872)	(196)	(233)	(234)	(209)

- c. Disadvantages of the Clinical Clerkship: as shown in Table 30, 37 per cent of those who know of the program can think of no disadvantages in such a clerkship for medical students like themselves. The disadvantage most frequently mentioned is that participation in the clerkship might have an adverse effect on family or personal lives -- separation from family, or interference with plans already made. One out of eight expressed the erroneous opinion that participation would, or might, result in incurring an obligation for future military service.

TABLE 30

"Would the Clerkship have any disadvantages for a medical student like you? What disadvantages?" (Asked only of those aware of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Specified program would have <u>no</u> disadvantages	37%	39%	29%	34%	48%
Disadvantages of --					
Adverse effect on family life, personal life	14	14	12	14	14
Pay poorer than elsewhere	11	12	9	12	11
Poorer program or poorer experience than elsewhere	10	8	8	15	7
Definite obligation for military service	7	7	12	6	1
Possible obligation for military service	5	5	8	3	6
Miscellaneous	6	4	8	7	3
Don't know, no answer	7	10	6	6	8
School schedule precludes participation .	<u>11</u>	<u>7</u>	<u>16</u>	<u>12</u>	<u>9</u>
Some mention more than one	108%	106%	108%	109%	107%
	(872)	(196)	(233)	(234)	(209)

- d. Suggestions for changes in the Army clerkship program were solicited from the students after they had read a summary of its principal features.* The results are presented in Table 31. More than half the medical students have no changes to suggest. The leading suggestion, offered by nine per cent, is that the content of the program be modified; other suggestions for change were scattered. A number of students would like to see the program lengthened to occupy the full summer rather than six weeks, either to provide full summer employment or more medical training.

TABLE 31

"Are there any changes in the Army Clinical Clerkship program which would (Fr. and Sos.: 'make') (Jrs. and Srs.: 'have made') you more interested in participating in the program? What changes?" (Asked of all students after they had read a summary of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
No changes suggested.	56%	60%	51%	52%	61%
Changes suggested --					
Modify content of the program	9	7	6	13	9
Eliminate the commission or obligation	7	7	8	7	4
Lengthen program, no reason given	5	4	5	8	5
Lengthen program to provide full summer employment	4	5	6	3	4
Lengthen program to provide more training	2	1	4	1	3
Make program more attractive for family man	4	3	5	4	3
Increase number or diversify kinds of hospitals having clerkships	3	2	3	3	2
Miscellaneous	6	7	7	6	7
No answer	1	2	1	*	1
School schedule precludes participation	10	7	14	11	8
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Some mention more than one	107%	105%	110%	108%	107%
	(1086)	(286)	(280)	(271)	(249)

* The summary is reproduced in the Appendix.

- e. Interest in participating in the Army Clinical Clerkship program is higher than for any of the other Army medical training programs: two-thirds of the medical students report that they are at least "Somewhat interested." Interest among the four classes of students is remarkably similar, even though it was shown earlier that fewer freshmen than seniors recall having prior information about Armed Forces Clerkships. The detailed findings on interest in participating appear in Table 32.

TABLE 32

"Here is a summary of the Army Clinical Clerkship Program. In general how interested (Fr. and Sos.: 'would you be') (Jr. and Srs.: 'would you have been') in participating in such a program-- very interested, somewhat interested, or not interested at all?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Very interested	24%	26%	22%	25%	25%
Somewhat interested	39	41	40	38	38
Not interested at all	35	32	38	37	35
(Jrs. and Srs.) Will participate, or have participated	1	-	*	*	2
No opinion, no answer	1	1	*	*	*
	100%	100%	100%	100%	100%
	(1086)	(286)	(280)	(271)	(249)

2. The Senior Medical Student Program

The purpose of this type of program in Armed Forces medicine is to provide financial support through the senior year in medical school in exchange for future service, and to familiarize the appointees with the advantages of a military medical career.*

* For further details on the Army's Senior Medical Student Program, see Appendix.

- a. Awareness of the program: about as many medical students-- four out of five-- know of the Armed Forces Senior Medical Student program as know of the Clinical Clerkships. As is shown in Table 33 more juniors than students in any other classes are familiar with the program.

TABLE 33

"Did you know that several of the Armed Forces offer Senior Medical Student appointments that students can hold throughout their Senior year?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Yes, knew there were such appointments	79%	68%	79%	94%	79%
No, never heard of them before	19	30	19	5	20
May have heard of them; am not sure	2	2	2	1	1
	<u> </u>				
	100%	100%	100%	100%	100%
	(1086)	(286)	(280)	(271)	(249)

- b. Advantages of the Senior Medical Student program: pay is most often mentioned. Seven out of ten who know of the program speak of pay as an advantage; it is mentioned at least three times as frequently as any other advantage. Further, almost half of those acquainted with the program specify that pay is the only advantage to participants. (See Table 34)

Advantages in terms of the student's military service are mentioned next most frequently. One in seven students who know of the program expresses the belief that the program is advantageous for military service-- that it is good to have time in the Reserve, or that it helps one to get into the service he prefers.

TABLE 34

"Would the Armed Forces appointments for the Senior year have any advantages for a medical student like you? What advantages?" (Asked only of those aware of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Specified program would have <u>no</u> advantages	22%	26%	24%	17%	24%
Advantage of --					
Pay the <u>only</u> advantage, specified	48	48	50	54	39
Pay an advantage but not only one	22	17	19	24	28
Advantage for future military service	14	9	12	13	22
Advantage educationally or in future medical career.	4	2	4	5	6
Advantage in working off draft obligation	2	2	2	2	2
Advantage in completing military obligation at higher rank.	1	-	2	1	2
Miscellaneous	2	4	1	1	*
Don't know, no answer	<u>5</u>	<u>6</u>	<u>4</u>	<u>3</u>	<u>5</u>
Some mention more than one	120%	114%	118%	120%	128%
	(885)	(201)	(226)	(258)	(200)

The chief difference in the advantages cited by members of the four school classes is that a greater proportion of seniors than of freshmen mention advantages in terms of their own future military service-- an understandable difference, since military service is more imminent for seniors than for freshmen.

- c. Disadvantages of the Senior Medical Student program: two out of three who know of the program mention obligations to subsequent military service which they might incur by signing up and most of these mention the pay-back time involved. Seven per cent mention other military obligations of a general or unspecified nature.

Other presumed disadvantages are spoken of only infrequently: Six per cent say they feel that participation would have disadvantages for their later medical careers, and five per cent object to any tie between the Senior Medical program and a Service internship. About one-seventh can think of no disadvantages. (See Table 35)

TABLE 35

"Would the Senior Medical program have any disadvantages for a medical student like you? What disadvantages?" (Asked only of those aware of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sn.</u>
Specified program would have no disadvantages	14%	20%	14%	9%	16%
Disadvantages of --					
Obligation to service, with pay-back mentioned	51	44	51	60	47
Obligation to service, with pay-back not mentioned	12	14	11	13	12
Military obligation of other or unspecified nature.	7	7	8	5	8
Obligation for Service internship	5	3	5	6	6
Disadvantages for subsequent medical career	6	4	6	7	4
Disadvantages in Senior year.	2	3	3	2	2
Need for early decision on entering service	2	1	2	2	3
Miscellaneous	5	3	6	5	4
Don't know, no answer	5	7	6	4	5
School schedule precludes participation .	1	2	1	1	1
	—	—	—	—	—
Some mention more than one	110%	108%	113%	114%	108%
	(885)	(201)	(226)	(258)	(200)

- d. Suggestions for changes in the Army Senior Medical Student program are concerned primarily with the commitment to active duty following internship. Forty-one per cent suggest that the time commitment might be cut down or eliminated, although one-fourth of the students making this suggestion also express reservations on its feasibility. Other suggestions are scattered; four out of ten can make no suggestions. (See Table 36)

TABLE 36

"Are there any changes in the Army Senior Medical Student program which would (Fr. and Sos. and Jrs.: 'make') (Srs.: 'have made') you more interested in participating in the program? What changes?" (Asked of all students, after they had read a summary of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>Sos.</u>	<u>Jr.</u>	<u>Sr.</u>
No changes suggested.	43%	48%	41%	40%	45%
Changes suggested --					
Cut down, eliminate time obligation, with statement that such would be unfair, impractical, or impossible for Army . .	9	7	9	10	8
Cut down, eliminate time obligation, with no such statement	32	28	32	33	36
Modify provisions for active duty stage .	6	5	8	6	5
Modify aspects of internship stage. . . .	4	4	5	3	2
Modify senior year provisions	3	2	4	3	1
Modify military aspects of the program. .	3	4	1	5	2
Eliminate Army internship as factor in participation	3	3	4	2	2
Guarantee Army internship to participants in program	1	1	1	2	*
Miscellaneous	5	5	5	6	4
Don't know, no answer	1	2	2	*	2
	---	---	---	---	---
Some mention more than one	110%	109%	112%	110%	107%
	(1086)	(286)	(280)	(271)	(249)

- e. Some degree of interest in participating in the Army Senior Medical program is expressed by 45 per cent of the students. Table 37 shows more lowerclassmen than upperclassmen expressing at least some interest.

TABLE 37

"Here is a summary of the Army Senior Medical Student program.^{*} In general, how interested would you (Fr. and Sos. and Jrs.: 'be') (Srs.: 'have been') in participating in such a program-- very interested, somewhat interested, or not interested at all?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Very interested	12%	18%	12%	7%	13%
Somewhat interested	31	38	32	27	23
Not interested at all	55	43	56	60	63
Will participate; am participating now	2	-	-	6	1
No opinion, no answer	*	1	-	*	-
	100%	100%	100%	100%	100%
	(1086)	(286)	(280)	(271)	(249)

3. Armed Forces Internships

- a. Awareness of the program: almost all medical students say they know that several of the Armed Forces offer internship training at various Service hospitals.^{**}

TABLE 38

"Did you know that several of the Armed Forces have internships at a number of Service hospitals?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Yes, know there are such internships	96%	93%	97%	98%	98%
No, never heard of them before	3	5	2	2	2
May have heard of them; am not sure	1	2	1	-	*
	100%	100%	100%	100%	100%
	(1086)	(286)	(280)	(271)	(249)

* See summary in Appendix. In this summary, the correct monthly minimum pay and allowances for a Second Lieutenant without dependents was understated through the inadvertent omission of the \$47.88 subsistence allowance. This understatement of the pay is assumed not to have had a serious effect on the level of interest expressed, judging from the small number of students who suggest that the pay might be higher.

** A summary of the Army Internship Program appears in the Appendix.

- b. Advantages of the Internship program: three out of five mention the Service Intern's pay; one in three underscores the point by saying that pay is the only advantage. There is little class variation in what is perceived as advantageous in Armed Forces Internships.

One-third of the students who say they have heard of Armed Forces Internships see no advantage in them, insofar as they personally are concerned. (See Table 39)

TABLE 39

"Would an Armed Forces internship have any advantages for a medical student like you? What advantages?" (Asked only of those aware of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Specified program would have <u>no</u> advantages	32%	31%	37%	31%	29%
Advantages of --					
Pay the <u>only</u> advantage, specified	33	34	34	31	33
Pay an advantage, but not only one	26	22	19	31	34
Opportunity for learning, training of intern	18	14	14	23	19
Good physical plant, facilities, staff.	8	7	8	8	9
Factor in future medical career	2	1	2	2	2
Aid in fulfilling draft obligation	4	7	4	3	4
Preparation for subsequent military service	3	3	2	3	4
Miscellaneous	8	4	5	9	14
Don't know, no answer	2	5	2	1	1
	---	---	---	---	---
Some mention more than one	136%	128%	127%	142%	149%
	(1057)	(271)	(274)	(267)	(245)

There is a decided difference between what medical students see as the advantages of a military internship and what they see as advantages in internships generally (see Table 40).

Only two advantages of Armed Forces Internships-- pay and learning opportunity-- are mentioned by as many as 18 per cent. In contrast, four-- the opportunity for learning or research, the variety or amount of case material, the geographic location, and advantages for the later medical career-- are mentioned as advantages in internships generally by equal or larger proportions of students.

TABLE 40

"What special advantages would there be to your serving an internship there (first choice hospital)?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Opportunity for learning or research.	50%	35%	49%	56%	61%
Variety or amount of case material.	36	38	40	34	32
Geographic location	22	22	19	24	25
Factor in later medical career	19	14	16	18	28
Responsibility, role of the intern	16	11	12	18	23
Physical plant, facilities available	13	14	12	12	12
Special internship program or program content	11	4	10	11	20
General reputation of the hospital	8	5	7	11	11
Pay	8	5	3	10	17
Miscellaneous	9	10	6	8	13
Don't know	1	2	1	*	-
<u>No</u> special advantages	*	*	-	-	-
<u>No</u> internship choice yet.	<u>9</u>	<u>14</u>	<u>12</u>	<u>7</u>	<u>*</u>
	202%	174%	187%	209%	242%
	(1086)	(286)	(280)	(271)	(249)

It appears from the findings that at present medical students are not well acquainted with any advantages of Armed Forces Internships-- other than high pay. It has been noted earlier in this report that military income in itself does not appear to be a compelling factor in deciding upon a military medical career.

- c. Disadvantages of Armed Forces Internships are stated primarily in terms of the military obligation arising from them, the limitations of case material, alleged poor quality or content of the internship program, limitations of location or choice of hospital, and possible adverse effects on one's later medical career. (See Table 41) More see disadvantages than see advantages for themselves in the military internship program.

TABLE 41

"Would an Armed Forces internship have any disadvantages for a medical student like you? What disadvantages?" (Asked only of those aware of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Specified program would have no disadvantages	17%	18%	18%	16%	15%
Disadvantages of --					
Military obligation resulting from internship	26	20	28	27	29
Limitations of case material.	22	26	25	20	18
Poor quality or content of Internship Program	20	21	18	22	20
Limitations of location or choice of hospital.	18	14	14	21	23
Effect on later medical career, other than factor of location of internship .	11	6	8	15	14
Military organization of medicine	10	9	7	10	12
Poor quality of doctor-patient relationship	1	*	*	3	2
Miscellaneous	5	4	5	5	7
Don't know, no answer	<u>4</u>	<u>6</u>	<u>6</u>	<u>2</u>	<u>2</u>
Some mention more than one	134%	124%	129%	141%	142%
	(1057)	(271)	(274)	(267)	(245)

Students who plan a general practice and those who anticipate some specialization are equally familiar with Armed Forces Internships, 97 per cent of each group knowing of them. Members of the two groups have virtually the same opinions on the advantages in Service Internships. They also have fairly similar opinions on the disadvantages they feel exist in such internships, but differ on two points: 24 per cent of those with "specialty" interests, compared to ten per cent of those planning a general practice, think Service Internships would be poor in the quality or content of their instruction; 13 per cent of the "specialists" and six per cent of the "GP's" feel a Service Internship would have a deleterious effect on subsequent civilian medical careers. The two groups differ little in their opinions of the adequacy of case material in a Service Internship.

- d. Suggestions for changes in the Army Internship program are relatively few and scattered in nature. (See Table L2) Sixty per cent are unable to suggest any changes. The leading suggestion, offered by 12 per cent, was that the military service obligation brought about by the internship be eliminated or reduced. Nine per cent suggest modifications in the character or content of the internship, and nine per cent suggest that interns be permitted their choice among Army hospitals.

TABLE L2

"Are there any changes in the Army Internship program which would (Fr. and So. and Jrs.: 'make') (Srs.: 'have made') you more interested in participating in the program? What changes?" (Asked of all students after they had read a summary of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
<u>No changes suggested.</u>	60%	61%	58%	60%	62%
Changes suggested --					
Eliminate or cut down the military obligation.	12	14	11	15	8
Modify character, content of internship itself.	9	9	9	8	9
Permit choice of hospital among Army hospitals	9	4	8	9	14
Count internship year as part of draft obligation.	3	4	5	3	1
Increase the pay, raise rank of interns .	3	2	5	2	2
Institute internships at civilian hospitals	2	2	2	3	3
Institute changes in residency, active duty stages	3	1	5	3	3
Miscellaneous	4	4	5	4	4
Don't know, no answer	<u>2</u>	<u>4</u>	<u>1</u>	<u>*</u>	<u>1</u>
Some mention more than one	107%	105%	109%	107%	107%
	(1086)	(286)	(280)	(271)	(249)

- e. Interest in an Army Internship: six out of ten students say they are at least "Somewhat interested" in participating in such a program. (See Table 43)

"Here is a summary of the Army internship program. How interested would you (Fr. and So. and Jrs.: 'be') (Srs.: 'have been') in participating in such a program-- very interested, somewhat interested, or not interested at all?"

TABLE 43

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Very interested	18%	21%	17%	19%	15%
Somewhat interested	42	44	43	44	33
Not interested at all	39	34	40	37	48
Scheduled for an Army internship.	1	-	-	-	4
No opinion.	*	1	-	-	-
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>
	(1086)	(286)	(280)	(271)	(249)

Expressed interest in the Army Internship is fairly constant for the first three classes in medical school, but is less for the seniors-- most of whom have already received their internship appointments.*

4. Armed Forces Residencies

- a. Awareness of the program: nine out of ten medical students say they know at least something about the residencies provided by several of the Armed Forces. Fewer freshmen than upperclassmen know about them. (See Table 44)

TABLE 44

"Did you know that several of the Armed Forces have residencies that are available to qualified physicians?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Yes, knew there were such residencies.	90%	78%	89%	96%	98%
No, never knew of them before	9	20	10	3	2
May have heard of them; not sure	<u>1</u> 100%	<u>2</u> 100%	<u>1</u> 100%	<u>1</u> 100%	<u>-</u> 100%
	(1086)	(286)	(280)	(271)	(249)

* Nineteen per cent of the seniors report that they listed one of the Federal services (Army, Navy, Air Force, USPHS, or VA) as one of their first three choices in the National Intern Matching Plan. Ten per cent of the seniors say they are scheduled for a Federal internship of some kind, including four per cent who have been granted an Army internship.

While the Army offers residencies in all recognized specialties, a substantial minority of medical students are not aware that an Army Residency is available in the specialty of their choice. Students preferring surgery or internal medicine are best informed on this point; those who prefer obstetrics and gynecology or pediatrics are least well informed. This would seem to indicate that medical students tend to think of "Army" medical care only in terms of male adult patients, forgetting that medical care is also available to dependents of Army personnel. (See Table 45)

TABLE 45

"Do you have any idea whether or not the Army offers a residency in the specialty you prefer most?"

	<u>Number of Students</u>	<u>Think Army Does</u>	<u>Think Army Does Not</u>	<u>No Opinion, Never Heard of Residency Program</u>	<u>Total</u>
Total expressing a preference for specialty.	(973)	78%	3%	19%	100%
Surgery.	(235)	87	-	13	100
Internal Medicine	(329)	84	*	16	100
Psychiatry and Neurology	(85)	73	1	26	100
Obstetrics and Gynecology.	(105)	70	5	25	100
Pediatrics	(103)	56	13	31	100
Other specialties.	(116)	74	7	19	100

- b. Advantages of the Residency program are viewed in a light similar to the Internship program. Half the students who know about the Service Residencies mention pay as an advantage; about two-thirds of those who mention pay do not mention any other advantages. Among the other advantages cited, the leading one is "good training or learning opportunity," which is mentioned by 12 per cent. Four in ten can think of no advantages to themselves in an Armed Forces Residency. (See Table 46)

TABLE 46

"Suppose you were planning to take a residency in a specialty. Would an Armed Forces residency have any advantages for you? What advantages?" (Asked only of those aware of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Specified program would have <u>no</u> advantages	38%	32%	43%	42%	34%
Advantages of --					
Pay the <u>only</u> advantage specified.	37	35	36	37	41
Pay an advantage, but not only one.	15	15	12	13	20
Good training or learning opportunity	12	12	10	11	15
Quality of facilities, equipment, physical plant	6	7	7	5	5
Miscellaneous advantages for long-term <u>medical</u> career.	1	1	1	1	3
Miscellaneous advantages for long-term <u>military</u> career	1	1	-	*	1
Miscellaneous, other than career considerations.	4	4	1	5	4
Depends on specialty, don't plan to take a residency, no answer, don't know.	5	12	6	4	1
	—	—	—	—	—
	119%	119%	116%	118%	124%
	(987)	(228)	(253)	(262)	(244)

- c. Disadvantages in an Armed Forces Residency program are seen, as with Armed Forces Internships, primarily in terms of the pay-back time commitment,* mentioned by 47 per cent of the medical students who know of the residency program. This point is raised by one-third of the freshmen and six out of ten seniors. (See Table 47)

* The Army resident must stay in service as a medical officer one additional year for each year of residency. For a summary of the Army Residency program, see Appendix.

The next most frequently mentioned disadvantages are concerned with the calibre of the training. Seventeen per cent have the impression that the residencies are poorer in quality of teaching or research opportunities than other residencies; 15 per cent have the idea that case materials for training purposes are limited.

The third type of criticism of Service residencies concerns the military nature of the programs. One student in ten cites as a disadvantage the belief that he would not have entirely free choice of the kind of residency or hospital; about the same number object to the military organization of the program, with criticism less in terms of the medical training than of the setting in which the training is offered; and about the same number object on the grounds that a Service Residency would entail disadvantages to a later civilian career.

One student in seven reports that a Service Residency would hold no disadvantages for him. More seniors than freshmen mention disadvantages.

TABLE 47

"Would an Armed Forces residency have any disadvantages for a person like you? What disadvantages?" (Asked only of those aware of program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Specified program would have <u>no</u> disadvantages	15%	23%	13%	11%	12%
Disadvantages of --					
Time commitment	47	33	44	52	59
Poorer quality of the teaching or research opportunity	17	16	15	20	16
Limitations of the case material.	15	14	16	14	16
Limitations of location, choice of residencies	10	10	9	11	9
Military organization of the program. . .	10	8	11	12	10
Effect on subsequent medical career, other than result of limited locations of residencies	9	7	8	10	10
Limitations of kinds of residencies available	2	2	3	2	1
Miscellaneous	3	4	3	2	4
Depends on specialty, don't plan to take a residency, no answer	<u>3</u>	<u>6</u>	<u>5</u>	<u>1</u>	<u>1</u>
	131%	123%	127%	135%	138%
	(987)	(228)	(253)	(262)	(244)

Attitudes of "GP's" and "Specialists": almost equal proportions of those planning to be "GP's" and those thinking of becoming "specialists" are familiar with the Armed Forces residencies, 89 and 92 per cent, respectively. Members of the two groups have fairly similar attitudes toward Service specialty training, although students planning some specialization are less inclined to see advantages in the Armed Forces residencies and more inclined to see disadvantages in them than are those who plan a general practice. Students planning some specialization also have a slightly less favorable opinion of the quality of the training in the Armed Forces residencies; 20 per cent of the "specialists", compared to ten per cent of the "GP's", express the belief that the quality of the teaching or lack of opportunity for research in a Service residency is a disadvantage in training for their specialty.

Attitudes toward the different features of Armed Forces residencies vary slightly depending on the medical specialty in which the student is interested. In almost all instances the differences between those who prefer the various specialties are less than ten per cent. Among students who prefer psychiatry, however, 64 per cent mention residency "pay" as an advantage while only 47 per cent of those who prefer pediatrics speak of this. Fifty-three per cent of those who are interested in surgery, compared to 40 per cent of those preferring psychiatry, cite the "time commitment" as a disadvantage arising from Armed Forces residencies. Eighteen per cent of those who prefer psychiatry as a medical specialty and seven per cent of those interested in obstetrics and gynecology specify the "military organization of the residency program" as a disadvantage to them.

- d. Suggestions for changes in the Army Residency program, summarized in Table 48, are focused, as with Army Internships, primarily upon cutting down or eliminating pay-back time. Other suggestions are relatively few, being directed primarily toward various ways in which the residencies might be made more like civilian residencies.

TABLE 48

"Are there any changes in the Army residency program which would make you more interested in participating in it? What changes?" (Asked of all students after they had read a summary of the program.)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
<u>No changes suggested</u>	44%	46%	44%	42%	43%
Changes suggested --					
Cut down, eliminate pay-back time, with statement that such would be unfair, impractical, or impossible for Army	6	4	8	7	6
Cut down, eliminate pay-back time, with no such statement	40	40	37	43	41
Have residencies in other areas, permit resident his choice of hospital	4	2	4	4	6
Have residencies in civilian hospitals	2	2	2	3	3
Modify military aspects of the program	2	2	2	2	2
Modify content of residency programs	1	2	*	1	1
Provide greater variety of case material	1	1	1	1	1
Miscellaneous	5	6	5	4	5
Don't plan to take a residency, don't know, no answer	3	3	3	2	2
	108%	108%	106%	109%	110%
	(1086)	(286)	(280)	(271)	(249)

- e. Interest in an Army Residency is expressed, at least to some degree, by slightly more than one-third of the medical students. (See Table 49) Fewer juniors than others express interest. One factor which may contribute to the relatively low level of expressed interest in the Residency is its remoteness in time for the bulk of the students. Further, as was reported earlier, (Section A) only 57 per cent report they are planning to take a residency.

TABLE 49

"Here is a summary of the Army Residency program. How interested would you be in having an Army Residency rather than some other kind-- very interested, somewhat interested, or not interested at all?"

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Very interested	6%	6%	5%	4%	9%
Somewhat interested	31	35	30	28	31
Not interested at all	62	57	64	68	60
No opinion.	1	2	1	-	*
	-----	-----	-----	-----	-----
	100%	100%	100%	100%	100%
	(1086)	(286)	(280)	(271)	(249)

There is no difference in interest expressed by those planning a general practice as compared with those who plan to specialize to some extent. There are slight differences in interest among those preferring the various specialties: more students who list obstetrics and gynecology express interest in an Army Residency (45 per cent) than do those who prefer psychiatry and neurology (34 per cent) or internal medicine (34 per cent.)

5. Interest in Participating in the Programs

- a. Interest in participating: the Clinical Clerkships elicit the most interest, followed in order by the Internships, the Senior Medical Student program, and the Residency program.

TABLE 50

<u>Army Program</u>	Per Cent Expressing Interest In Participation				
	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
<u>Clinical Clerkship:</u>					
Very interested or participant	25%	26%	22%	25%	27%
Somewhat interested	39	41	40	38	38
	<u>64%</u>	<u>67%</u>	<u>62%</u>	<u>63%</u>	<u>65%</u>
<u>Senior Medical Student Program:</u>					
Very Interested or participant	14%	18%	12%	13%	14%
Somewhat interested	31	38	32	27	23
	<u>45%</u>	<u>56%</u>	<u>44%</u>	<u>40%</u>	<u>37%</u>
<u>Internship:</u>					
Very interested or participant	19%	21%	17%	19%	19%
Somewhat interested	42	44	43	44	33
	<u>61%</u>	<u>65%</u>	<u>60%</u>	<u>63%</u>	<u>52%</u>
<u>Residency:</u>					
Very interested	6%	6%	5%	4%	9%
Somewhat interested	31	35	30	28	31
	<u>37%</u>	<u>41%</u>	<u>35%</u>	<u>32%</u>	<u>40%</u>

Levels of interest were determined by showing each student a summary of each program (see Appendix) and then asking him how interested he would be in such a program. The intent of this procedure was to obtain a measure of "interest" which would be about equivalent to the maximum interest that would be achieved if each student had been rather fully informed of the advantages of each program.*

* It should be borne in mind, when comparing expressions of interest from class to class, that questions on interest in participation in certain of the programs may seem unrealistic to students who have already progressed beyond that stage in their education, with a resultant minimizing effect on expressions of interest. In part this may account for the lower level of interest in the Senior Medical program and the internships found among Seniors.

- b. Aggregate interest: one way to assess group differences in aggregate interest in the four programs is to compare the average number of programs in which interest is expressed. Table 51 presents a summary of these averages for various groups of students.

On the average, students express some interest in participating in two of the four programs. (Eighteen per cent express no interest in any of the programs; 20 per cent show interest in one program; 20 per cent in two programs; 21 per cent in three programs; and 21 per cent in all four programs.)

TABLE 51

<u>Group</u>	<u>No. of students</u>	<u>Average (mean) no. of programs in which students express interest in participating</u>
Total	(1086)	2.1
Freshmen	(286)	2.3
Sophomores	(280)	2.0
Juniors	(271)	2.0
Seniors	(249)	1.9
Claimed position* within class:		
"Top quarter"	(280)	2.0
"Second quarter"	(460)	2.1
"Third" or "Fourth" quarter	(335)	2.1
Expectation of going on active duty in one of Armed Forces:**		
Almost certain to go.	(830)	2.2
Fairly certain; not at all certain.	(249)	1.7
Previous military service	(174)	1.5
No previous service	(912)	2.2

* It is evident that many students must have claimed a higher standing in their classes than they actually had. However, responses were considered sufficiently reliable for the purpose of this limited comparison.

** This grouping was based on the question, "What do you think the chances are that you will ever be going on active duty in one of the Armed Forces--almost certain, fairly certain, or not at all certain?"

The responses on this question were: 76 per cent "almost certain," 11 per cent "fairly certain," 12 per cent "not at all certain," and one per cent, unable to guess. Among those who were not "almost certain" they would be going on active duty, half mention previous service as a reason they might not be called, and 18 per cent express the opinion that there is a decreased likelihood of compulsory service-- that the "Doctor Draft" might be eliminated.

TABLE 51 (Continued)

<u>Group</u>	<u>No. of students</u>	<u>Average (mean) no. of programs in which students express interest in participating</u>
Married	(375)	2.0
Not married	(709)	2.1
How difficult to get along financially until established:		
Very difficult.	(130)	2.2
Fairly difficult.	(696)	2.1
Not difficult at all.	(256)	1.8
Estimate of working father's income:		
Less than \$5,000	(151)	2.4
\$5,000 through \$7,499	(224)	2.3
\$7,500 through \$14,999	(263)	2.0
\$15,000 or more	(206)	1.8
Students in privately financed schools.	(556)	2.0
Students in publicly financed schools	(530)	2.2
Region of School:		
North Central	(331)	2.2
West	(95)	2.2
South	(382)	2.0
Northeast	(278)	1.9

It is seen, in Table 51, that aggregate interest in the four programs does not vary much among the various groups of students. The more noteworthy findings appear to be:

- Those who are "almost certain" that they will be going on active duty in the Armed Forces express more interest than those who are less certain about going into service
- Those who have had previous military service express less interest in participating in the four programs than those who have had no service. A separate tabulation of students who have served shows that three times as many of those who have had Army experience as of those who served in another branch would like to take part in all the Army training programs. Limited data indicate that those who have served in the Army Medical Corps do not differ from other Army veterans in their expressions of interest in the training programs in the aggregate.

- Financial factors appear to be fairly important in inducing interest in the Army programs, although it is the student's total financial picture rather than particular aspects of it that is important. Thus, whether the student is married, (or, for that matter, whether he has children or whether his wife works) appears to have little relationship to a student's expressions of interest. Students who anticipate that it will be "very difficult" to get along financially until they have established their medical careers express somewhat more interest than those who anticipate no financial difficulty. The income of the student's father appears to be related to the student's interest in participating in the programs: those whose fathers are living and working but make less than \$7,500 per year express interest in participating in more of the Army programs than any other group analyzed.

- Slight differences in expressed interest in participation are noted between students in publicly-supported and privately-supported schools, and between students going to school in the several regions of the country. It is not possible to establish the causal relationships responsible for these slight differences, which may be attributable in part to the effects on student attitudes occasioned by attending particular schools, and in part by differences in the backgrounds of students at the various schools.

- Students who claim they are in the "top quarter" in their class in medical school are not materially different from other students in their expressions of interest in the four programs as a whole.

In conclusion, as long as conditions remain as they were at the time of the study, it appears that the potential for recruitment to the programs will be good.

SUMMARY: Awareness of the programs--recalling that these Armed Forces programs exist--varies according to the program and according to the student's class in school. Table 52 indicates that:

Students are more aware of the Residency and Internship programs than of the Clinical Clerkship or Senior Medical Student programs, perhaps because the Residency and Internship programs have been in existence for a longer period of time.

In general, upperclassmen are more aware of programs than freshmen are.

The highest proportion of awareness of a program is at the class level where one would expect the most immediate concern with the specific program. A higher proportion of juniors than of lowerclassmen and seniors say they have heard of the Clinical Clerkships and Senior Medical Student programs and a higher proportion of seniors and juniors say they have heard of the Internship and Residency programs than is true of lowerclassmen.

Awareness of the programs is not highly correlated with interest in participating in them.

TABLE 52

Per Cent Saying They Knew of Armed Forces Program

<u>Program</u>	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Clinical Clerkship*	79%	67%	82%	86%	83%
Senior Medical Student.	79	68	79	94	79
Internship.	96	93	97	98	98
Residency	90	78	89	96	98

Advantages and Disadvantages of the programs: more medical students are inclined to see disadvantages than advantages in the programs.

In all of the programs except the Clinical Clerkship, the pay to participant is mentioned as the chief advantage. Learning or training opportunities are mentioned relatively seldom as an advantage.

In all of the programs but the Clinical Clerkship, the time obligation or commitment to active service which results (or may result) from participation in the program, is cited most frequently as a disadvantage.

A fairly frequent criticism of all programs but the Clinical Clerkship is that participation in the program might have an adverse effect on a subsequent medical career.

* Includes those who had participated or were scheduled to participate in the program.

Suggestions for changes in the programs focus on three points: elimination or reduction of pay-back time; insurance of higher-quality teaching or training; greater flexibility or more individualized handling of the participants in the programs. From half to two-thirds of the medical students have no suggestions to make on any one program.

In some instances suggestions for changes indicate that misconceptions about the programs are rather common, especially regarding the commitment to additional military service incurred through participating in a program. These misconceptions are described in some detail in Section D.

Interest in participating is greatest for the Clinical Clerkship, followed in order by the Internship, Senior Medical Student program, and the Residency.

On the average, students express some interest in participating in two of the four programs.

More express interest in participating among those "almost certain" of active military duty or those who have had no previous military service. More express interest in participating among those anticipating considerable financial difficulty until their careers are established or who come from families relatively less privileged economically than other medical students. There are only slight or no differences in interest in participating between students attending privately- or publicly-financed schools, or schools in different regions of the country, or students reporting themselves in the top quarter of their school class compared to students in the three other quarters.

D. LEVEL OF INFORMATION CONCERNING THE TRAINING PROGRAMS

It is assumed that a certain minimum amount of correct information on a training program is essential for a student to take a positive interest in participating in the program. In this survey a limited number of items were included to determine how much correct information students have about the various programs, and to analyze the relationships, if any, between correctness of information and interest in participating in the programs.

Students' information on the programs was measured by these means:

A gross measure of information was obtained from student awareness or lack of awareness of the military medical training programs. Findings on these questions were presented in Section C.

From one to three questions concerning specific points of information were asked regarding each of the various programs. Findings on the proportions of students giving correct answers on the specific items are presented below. Responses of each student on the eight items were scored for correctness. This level-of-information score is discussed later in this section.

Students were also asked whether they had received any information on any of the Army programs from five sources: a procurement officer from the Army Medical Service, medical school faculty members, other medical students, bulletin boards at school, or periodicals and other publications. Findings on these sources of information are summarized later in this section.

In interpreting the implications of a relatively low level of correct information among any group of medical students in this study, it should be recognized that greater availability of correct information on the programs will not necessarily result in better-informed students, insofar as level of information is a function both of availability of information and student interest in being informed

1. Specific Points of Information on the Four Programs

- a. The Clinical Clerkship: 80 per cent of the medical students say they are aware that some of the Armed Forces offer such appointments. One specific information question about the Clinical Clerkships was asked of those who said they had heard of the program. Results appear in Table 53.

Commitment: it is seen that 56 per cent of students aware of the clerkships (or 45 per cent of all students) give the correct answer: accepting a clerkship does not involve a commitment for further service in the Armed Forces. Freshmen and sophomores are less well informed on this point than upperclassmen.

Kind of Commitment: A follow-up inquiry to determine the kind of commitment students think is made in accepting a clerkship shows the most frequent response to be that the clinical clerk commits himself to spend additional time in the service. This impression is reported by 20 per cent of those who know of the clerkships. Less frequently mentioned are the impressions that the student makes a commitment to accept a commission that might involve active duty later, or that the clinical clerk commits himself to participate in other Armed Forces medical training programs.

TABLE 53

"As you understand it, when a medical student accepts a Clinical Clerkship, does he make a commitment for service in the Armed Forces?" (Asked of those aware of the program)

	Total	Fr.	So.	Jr.	Sr.
Not aware of program	20%	32%	17%	14%	16%
Think he does	33	39	45	31	13
Think he does not <u>CORRECT</u>	56	42	43	60	80
Have no idea.	11	18	12	9	6
Varies from service to service.	*	-	-	-	1
No answer	*	1	-	-	*
	100%	100%	100%	100%	100%
	(873)	(196)	(233)	(234)	(210)

b. The Senior Medical Student program: inquiry was made about the senior appointee's pay, and commitment to Armed Forces' service after the senior year. Responses appear in Table 54.

Pay: one quarter of the students who had heard of such programs in the Armed Forces mention a monthly sum which falls within the "correct" range of \$330 to \$379 for Army appointments.* There is a tendency to underestimate, rather than to overestimate, the pay.

Commitment: ninety-four per cent of those who have heard of the program assume correctly that an appointee makes a commitment to serve in the Armed Forces after his graduation. (In the Army program, the commitment is to serve as an Army intern if chosen and for three years' active duty--two years' required service plus one year of pay-back time--as a captain in the Army Medical Corps upon completion of the internship.)

* Actually, pay, quarters, and subsistence allowances for Army second lieutenants who have had no previous military service range from \$338.58 for men with no dependents to \$355.68 for those who have dependents. The income range labeled as "correct" is broader than the actual range, thus giving some respondents the benefit of the doubt.

TABLE 54

"As you understand it, about how much per month does a Senior appointee get paid?" (Asked of those aware of the program)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Not aware of program	19%	30%	19%	5%	20%
Less than \$100	3	1	3	2	8
\$100 to \$199	4	3	1	5	6
\$200 to \$249	7	9	5	8	9
\$250 to \$329	30	25	36	34	23
\$330 to \$379 <u>[CORRECT]</u>	26	25	31	30	18
\$380 and over	14	15	10	11	19
No answer; no idea.	16	22	14	10	17
	100%	100%	100%	100%	100%
	(884)	(201)	(226)	(258)	(199)

"As far as you know, when a medical student accepts an Armed Forces appointment for his Senior year, does he thereby make any commitment to serve in the Armed Forces after he finishes his Senior Year?" (Asked of those aware of the program)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Not aware of program	19%	30%	19%	5%	20%
Think he does <u>[CORRECT]</u>	94	95	95	94	90
Think he does <u>not</u>	4	2	3	4	7
Have no idea.	2	3	2	1	3
No answer	*	-	*	1	*
	100%	100%	100%	100%	100%
	(884)	(201)	(226)	(258)	(199)

- c. The Internship Program: three aspects of the program were asked about-- the rank at which Army interns serve, Army internship pay, and presence or absence of a pay-back commitment in an Army internship. Responses on these three items are summarized in Table 55.

Rank: 61 per cent are correct in their belief that Army interns have the rank of First Lieutenant. Correct answers are given by half of the freshmen and three-fourths of the seniors. Among those who are incorrectly informed, the tendency is to understate the rank.

Pay: two-thirds give estimates which fall within the range of \$275 to \$424 (actual pay ranges from \$307.24 per month for those without dependents but with furnished quarters to \$401.44 for interns with dependents but no quarters furnished.) The tendency, especially among seniors, is to overestimate the pay.

Pay-back time: 41 per cent are correct in their impressions that the internship plan in itself does not involve a commitment of pay-back time. Forty-five per cent have the idea there is a pay-back period of one to two years. This misunderstanding probably stems from the fact that accepting an internship does involve a commitment to serve for two years beyond the internship if one has had no prior military service--but such a service commitment is for the purpose of fulfilling the normal two-year Selective Service requirement rather than constituting pay-back time for the internship.

Accepting an Army internship would involve a commitment of further time beyond the internship for most students, since 84 per cent of those interviewed have not as yet fulfilled their two-year service obligation. However, the purpose of the commitment is misunderstood by many students. It cannot be determined from this study how seriously recruitment for Army internships may be affected by such misunderstandings.

TABLE 55

"At what grade or rank do the Army interns serve, so far as you know?"
(Asked of those aware of the program)

	Total	Fr.	So.	Jr.	Sr.
Unfamiliar with program	3%	5%	2%	2%	2%
Second lieutenant	31	39	36	29	17
First Lieutenant <u>CORRECT</u>	61	50	58	62	73
Captain or higher rank	6	6	4	6	8
Some other status	*	1	-	-	1
Have no idea; no answer	<u>2</u>	<u>4</u>	<u>2</u>	<u>2</u>	<u>1</u>
	100%	100%	100%	100%	100%

"Do you have any idea how much the Army internship would pay you per month, including all pay and allowances?" (Asked of those aware of the program)

	Total	Fr.	So.	Jr.	Sr.
Unfamiliar with program	3%	5%	2%	2%	2%
Less than \$225	1	3	2	*	*
\$225 to \$274	2	4	*	3	*
\$275 to \$424 <u>CORRECT</u>	68	63	70	74	64
\$425 to \$474	12	10	11	11	16
\$475 and over	11	7	11	9	17
Have no idea; no answer	<u>6</u>	<u>13</u>	<u>6</u>	<u>3</u>	<u>3</u>
	100%	100%	100%	100%	100%

"As you understand it, does the Army internship plan in itself commit the intern to serving any pay-back time in the Army for the internship? How long?" (Asked of those aware of the program)

	Total	Fr.	So.	Jr.	Sr.
Unfamiliar with program	3%	5%	2%	2%	2%
Yes, a pay-back period of one year	33	35	38	32	26
Two years	12	15	9	9	12
Three years or longer	4	8	5	3	2
Yes, but don't know how long a period	5	5	7	5	1
No pay-back period <u>CORRECT</u>	41	27	33	48	57
Have no idea; no answer	<u>5</u>	<u>10</u>	<u>8</u>	<u>3</u>	<u>2</u>
	100%	100%	100%	100%	100%

(1057) (271) (274) (267) (245)

d. The Army residency program: two points of information were covered--the minimum rank of Army residents, and pay-back-time commitment made by residents. Results are presented in Table 56.

Rank: about three-fourths of the medical students are correctly informed that the minimum rank of the Army resident is captain, but a substantial number underestimate it.

Pay-back time: about two-thirds of the upperclassmen-- those most immediately concerned with the prospects of a residency-- are correctly informed that the pay-back time is one additional year of service for each year of residency.

TABLE 56

"What is the lowest rank at which Army residents serve, so far as you know?" (Asked of those aware of the program)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Unfamiliar with program	9%	20%	10%	3%	2%
Second Lieutenant	2	3	2	1	2
First Lieutenant	21	26	26	14	17
Captain <u>[CORRECT]</u>	72	64	66	80	76
Major or higher rank	1	1	1	1	2
Have no idea	<u>4</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>
	100%	100%	100%	100%	100%
	(987)	(228)	(253)	(262)	(244)

"Suppose a physician has a three-year Army residency. As you understand it, is he committed to staying in the Army for any time beyond the period of his residency? For how long?" (Asked of those aware of the program)

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Unfamiliar with program	9%	20%	10%	3%	2%
Yes, for <u>less</u> than three additional years	9	12	9	8	6
Yes, for three additional years <u>[CORRECT]</u>	56	44	54	62	64
Yes, for <u>more</u> than three additional years	15	12	17	13	19
Yes, but don't know how long	7	9	7	6	5
No, not committed for any extra time	6	10	8	6	2
Have no idea on this	<u>7</u>	<u>13</u>	<u>5</u>	<u>5</u>	<u>1</u>
	100%	100%	100%	100%	100%
	(987)	(228)	(253)	(262)	(244)

2. General Level of Information

Each student was scored on the basis of his answers to the eight information items concerning the training programs. Students were classified as "poorly informed" if they gave no more than two correct answers, "moderately informed" if they gave three to six correct responses, and "well informed" if they answered seven or eight items correctly.*

Table 57 shows the level of information for various groupings of medical students.

* On one of the eight items, the pay of an appointee in the senior medical student program, the responses classified as "correct" (see Table 54 above) were finally re-grouped somewhat differently from what they had been in scoring this item for the aggregate level-of-information score. Thus there is some inaccuracy in the aggregate information score, although it is slight.

TABLE 57

General Level of Information on Four Army Medical Training Programs

<u>Group</u>	<u>No. of students</u>	<u>"Poorly informed" (0-2 correct ans.)</u>	<u>"Moderately informed" (3-6 correct ans.)</u>	<u>"Well informed" (7-8 correct ans.)</u>	<u>Total</u>
All students.....	(1086)	15%	69%	16%	100%
Freshmen.....	(286)	32	62	6	100
Sophmores.....	(280)	15	74	11	100
Juniors.....	(271)	5	72	23	100
Seniors.....	(249)	7	68	25	100
Claimed position within class:					
"Top quarter".....	(279)	11	73	16	100
"Second quarter".....	(460)	15	67	18	100
"Third" or "Fourth".....	(335)	17	69	14	100
Practice plans:					
General practice.....	(271)	18	69	13	100
Specialize some.....	(153)	16	69	15	100
Take a residency.....	(617)	14	68	18	100
Expectation of going on active duty in one of the Armed Forces:					
Almost certain to go.....	(830)	15	69	16	100
Fairly certain; not at all certain.....	(249)	17	69	14	100
Difficulty in getting along financially until established in practice:					
Very difficult.....	(130)	12	70	18	100
Fairly difficult.....	(695)	14	69	17	100
Not difficult at all.....	(256)	20	67	13	100
Earned money during year	(511)	12	68	20	100
Did not earn money	(575)	18	70	12	100
Students in privately-financed schools.....	(556)	14	70	16	100
Students in publicly-financed schools.....	(530)	17	67	16	100

TABLE 57 (Continued)

General Level of Information on Four Army Medical Training Programs

<u>Group</u>	<u>No. of Students</u>	<u>"Poorly informed" (0-2 correct ans.)</u>	<u>"Moderately informed" (3-6 correct ans.)</u>	<u>"Well informed" (7-8 correct ans.)</u>	<u>Total</u>
Region of school:					
West.....	(95)	5%	76%	19%	100%
South.....	(382)	13	68	19	100
Northeast.....	(278)	16	69	15	100
North Central.....	(331)	20	68	12	100
Interest in Federal medical program, "at least for a while":					
Army.....	(527)	15	68	17	100
Other military.....	(160)	15	68	17	100
Civilian (VA,USPHS).....	(192)	18	71	11	100
Not interested at all	(207)	15	70	15	100
Number of Army programs in which interest in participating is expressed:					
All four programs.....	(224)	11	72	17	100
Three programs.....	(228)	12	68	20	100
Two programs.....	(221)	17	65	18	100
One program.....	(213)	17	67	16	100
None of the four.....	(200)	20	72	8	100
Source of information on any of the four programs:					
AMS Procurement officer	(559)	7	71	22	100
Not from that source	(527)	24	66	10	100
Medical school faculty	(390)	6	72	22	100
Not from that source	(696)	20	67	13	100
Other medical students	(831)	14	71	15	100
Not from that source	(255)	19	63	18	100
Bulletin boards at school	(611)	10	72	18	100
Not from that source	(475)	22	65	13	100
Periodicals, other publ.	(671)	10	70	20	100
Not from that source	(415)	23	67	10	100

The proportion of students who are "well informed", in the aggregate, on the four Army medical training programs is highest in the following groups:

- among upperclassmen, in contrast to freshmen and sophomores
- among those who earned money during the school year, and who may be more interested than others in income they might get from participation in programs
- among students in medical schools in the West or South
- among those interested in participating in one or more of the four Army medical training programs
- among those who say they obtained information about one or more of the programs from Army Medical Service procurement officers or medical school faculty members, in contrast to those who said they had obtained information from other medical students. (A separate tabulation shows that 30 per cent of the students who say they obtained information from all of the five listed sources are "well informed" on the programs.)

Little or no difference in level of information is found in these groupings of medical students:

- class position in school claimed
- plans for a general practice, some specialization or a residency
- expectation of active duty in one of the Armed Forces
- students at privately- or publicly-financed schools
- interest or lack of interest in working in the Army "at least for a while"

3. Sources of Information on Army Programs

Students' recollections of their sources of information about any of the four Army medical training programs are summarized in Table 58. Of the five types of sources specifically covered, the greatest number of students-- three-fourths-- say they obtained some information on the programs from other medical students. Half recall obtaining information on the programs from a procurement officer from the Army Medical Service.

Four per cent of the medical students say that they did not get information on any of the four programs from any of the five sources. Sixty per cent say they obtained information from three or more of these five sources.

TABLE 58

"Now I'd like to know where you might have gotten any information about any of the four Army programs-- the Clinical Clerkships, the Senior Student program, the internships, or the residencies:

"Did you get any information about any of these Army programs from: (name of each potential source)?

"Did that source present a generally favorable, or generally unfavorable, picture of these Army programs?"

<u>Source of Information</u>	<u>Per Cent Getting Information from Source</u>	<u>Information from that Source was Generally:</u>			<u>Total Getting Information</u>
		<u>Favorable</u>	<u>Mixed</u>	<u>Unfavorable</u>	
Other medical students?.....	75%	29%	55%	16%	100% (824)
Periodicals and other publications?.....	62	71	23	6	100 (672)
Bulletin boards at school?.....	57	73	21	6	100 (612)
A procurement officer from the Army Medical Service?.....	51	80	11	9	100 (553)
Medical school faculty members?.....	37	37	40	23	100 (391)

Considerable caution is advised in assessing the reported favorableness or unfavorableness of pictures of Army medical training from the various sources. The question asked whether the source presented a generally favorable or unfavorable picture. However, many students appear to have responded in terms of their own opinions about the Army programs.

While more students report a favorable picture than report an unfavorable one of the Army programs from each source, differences in proportion of favorable or unfavorable pictures are considerable.

Eight out of ten report getting a favorable picture of the programs from AMS procurement officers. Bulletin boards and periodicals rank next in proportion of students with favorable information obtained from them.

Fewer students report getting favorable information from other medical students and from medical school faculty members.

These data point up the importance of the AMS procurement officer. Although only half the students recall getting information on the programs from these officers, they are the source cited by students for the greatest proportion of favorable pictures of the programs. In addition, contact with them (and with faculty members) is related to a relatively high level of information on the programs.

SUMMARY: More students say that they have heard of the internship and residency programs than recall having heard about the newer clinical clerkships or senior medical student programs.

Medical students show some tendency to underestimate the rank of appointees in various of the Army training programs, and to overestimate the amount of additional active duty time to which appointees commit themselves.

Sixteen per cent of the medical students are classified "well informed" on the four programs (correctly answered at least seven out of eight questions of fact about the programs). A similar number, 15 per cent, are classified as "poorly informed" (answered fewer than three of eight questions correctly).

The degree to which a student is accurately informed on the programs depends in part on the number and kinds of his sources of information. Information from an Army Medical Service procurement officer or medical school faculty member makes for greater accuracy of information, and information from fellow students makes for less.

Little difference in accuracy of information is found in comparing students who differ in their claimed standing in class in school, plans to specialize or to have a general practice, expectation of going on active duty in one of the Armed Forces, or interest in working in Army medicine "at least for a while."

The most frequent source of information about the programs appears to be other medical students. Of five possible sources, medical school faculty members are mentioned least often as a source of information. Half the students recall obtaining information on the programs from an Army Medical Service procurement officer.

Among students who remember receiving information from any of the five sources, more report that the source presented a favorable picture of the Army programs than say that the picture was an unfavorable one. Students report getting proportionately the least favorable account of the Army programs from other medical students and from medical school faculty members. For reasons given earlier, considerable caution is to be exercised in drawing conclusions from this finding.

E. CHARACTERISTICS OF STUDENTS INTERESTED IN ARMY MEDICINE

Other studies* have made it clear that only a relatively small proportion of medical students, interns, or physicians in non-military practice would choose the Armed Forces as a career in the economic and social climate that prevails in medicine in the United States. Earlier in this report, as well, it was shown that few medical students today have a high degree of interest in an Armed Forces career.

Only one per cent of this national sample of medical students choose "Medical Officer in one of the Armed Forces" as the type of career in which they prefer to spend most of their professional lives.

Only two per cent of the total interviewed say that if net income from civilian and military medical work were absolutely the same, they would prefer a career in military medicine.

Only eight to 11 per cent of the total say they would be "very interested" in working as a physician, at least for a while, in the Army, or Navy, or Air Force medical services.

Even so, only a relatively small proportion of each year's medical school graduates is needed by the Army Medical Corps to keep its peacetime complement of Medical Officers up to authorized levels--if it were possible for the Army to recruit only those who would remain in the Service throughout their careers. If such future career officers could be singled out with high precision, recruitment of as few as one per cent of the total yearly medical school graduates--or about 70 men--would go a long way toward maintaining the Army Medical Corps at authorized peacetime strength.

A study of this scope could not be designed to make it possible to predict precisely which medical students would make a career of Army medicine if offered the opportunity; however, analysis of the characteristics of those medical students who express some interest in an Army career may contribute to Army Medical Corps efforts to concentrate attention on medical students with the highest potential of becoming career Medical Officers.

One difficulty in identifying groups of students of high Army career potential arises from the homogeneity of the medical student population.

* NORC itself has conducted two other studies in the area of the attitudes of medical men toward Armed Forces medicine. In August, 1947 an exploratory survey of 194 interns in 34 hospitals was made. Results of this survey were reported under the title, "The Interne Looks at the Army" (Chicago, 1947). In August, 1948 NORC carried out a nation-wide survey of three groups of medical men--455 junior and senior medical students attending the summer session of their medical school, 654 interns and residents in 42 hospitals throughout the country, and a national sample of 1,162 physicians in private practice. Results of this study were reported in "Careers for Medical Men," Report No. 38 (Chicago, 1948).

Students are so much alike in many respects that it is difficult to single out a substantial number who deviate in any one direction. Illustrative of the homogeneity of this sample of male medical students are the following:

Ninety-six per cent are of the white race; 98 per cent are between 21 and 30 years of age. They are, in addition, quite homogeneous in previous and present education and in future professional plans, compared to those of the same age and sex in the country as a whole.

Seventy-four per cent of the students in the sample report their father's occupation as in the "professional" or "managerial" category. On a national basis, according to the 1950 Census, only 18 per cent of employed males are in "professional" or "managerial" occupations.

Medical students, as a group, come from families having income higher than the national average. Students whose fathers are living and working report their fathers as having median incomes of \$8,440 in the year preceding the study. In contrast, although the figures are not strictly comparable, according to the Survey of Consumer Finance of the Federal Reserve Board, the median income for all "spending units" in 1955 was \$3,960, and median reported "family income of all related persons living together" was \$4,260.*

Fifty-four per cent of the students report their fathers as having at least some college training. On a national basis, according to the 1950 Census, fourteen per cent of the male population 25 years of age and over has had some college training.

Thus, the average medical student is rather privileged in his family economic and educational background. He comes from a home environment where higher-than-average incomes are probably taken for granted and during the school year is surrounded by fellow students of generally similar backgrounds. Further, during the medical-school process of becoming a doctor, the average student is continually exposed to a set of medical traditions that put a high premium on non-salaried rather than salaried, and private rather than public, medical careers. The influences brought to bear upon the average medical student, in short, tend to discourage an active interest in a military career. Students who do go on to a military medical career are usually departing from the established norms of their environment.

In describing the characteristics of the medical students who are most interested in Army medicine, a special group was singled out, composed of the following students:

Those who say they would be either "very interested" or "somewhat interested" in working as a physician, at least for a while, as an officer in the Army Medical Corps. Forty-five per cent of the students express such interest in Army medicine. The remainder of the special group consists of an additional four per cent of the students who had expressed no short-term interest in the Army but who would choose a

* "1956 Survey of Consumer Finances, The Financial Position of Consumers," Federal Reserve Bulletin, XLII (June, 1956), 559-60.

career in Army medicine in preference to a career in one of the other Federal medical services.

Table 59, at the end of this section, shows the proportions of students who fall into this special group, among those giving varying responses on these areas of inquiry in the survey:

1. General professional attitudes or values
2. Opinions on Armed Forces and Army medicine
3. Sources of impressions about Army medicine
4. Background or personal characteristics

The differences in interest in Army medical careers among medical students in the various groupings are summarized below:

1. General professional attitudes or values: the only item which reveals differences in interest in an Army medical career of possible consequence is that those who say it is "very important" to them to make a good income are less interested in the Army than others.
2. Opinions on Armed Forces and Army medicine: those who cite good facilities, staff, or program as advantages in an Armed Forces career are relatively more interested than others in Army service. Those who cite as "advantages" the fact that a practice in the Service is already assured, or that Armed Forces medical careers involve less responsibility or worry, are less interested in Army careers than others. It is suspected that students who think up such "security" reasons as advantages of Armed Forces medical service may not see such reasons as real advantages.

Those who mention as disadvantages in an Armed Forces career "adverse effects on family or personal life" or "the nature of the doctor-patient relationship" are more interested in a short-term Army career than others. For those who mention "adverse effects on family or personal life," this finding may reflect a tendency on the part of those who expect to go into the Armed Forces to give more thought than other medical students to the possible deprivations involved.

Those who have the impression that career Medical Officers in the Armed Forces tend to be "different" from civilian physicians, are less interested in an Army career than others.

More of those who think patients in Army hospitals generally get better care than they would in civilian hospitals are interested in an Army career than are those who think Army-hospital patient-care is poorer.

Significantly more of the students who think they would have a sufficient variety of case material in Army medicine to meet their professional needs are interested in an Army career.

More of those who rate themselves as "very interested" in participating in any of the four Army medical training programs are interested in Army medicine as a career than are others. This is particularly true of those "very interested" in the Senior Medical Student and Residency programs, although too few students are "very interested" in an Army Residency for reliable comparisons.

3. Sources of impressions about Army medicine indicate that more students who recall getting impressions from Regular Army Medical Corps officers are interested in an Army medical career than other students. This may be attributable in part to the fact that students who are interested in an Army medical career will be more likely to seek out Army Medical Corps officers.

Students who recall getting impressions about Army medicine from relatives who were non-military physicians or their own experiences in military service, are relatively less interested than others in an Army career.

4. Background or personal characteristics: relatively more students in the following sub-groups are interested in an Army medical career:

Seniors in medical school

Those planning to specialize to some extent in their practice but not planning now to take a residency

Those who are "almost certain to go" on active duty

Those who have never served in the Armed Forces

Those few who hold a Reserve or National Guard commission

Those who have had advanced R.O.T.C. training

Those who have had no governmental assistance in medical or pre-medical school. (This is probably a reflection of basic attitudes of veterans and non-veterans concerning Army careers.)

Those who did not participate in sports in high school or pre-medical college

Those who had a close relative (not in the immediate family) who is, or has been, a physician. (Those who have a parent who has been a physician form one of the groups least interested in Army medicine.)

Those whose fathers worked and had an income of less than \$7,500 the previous year.

Those whose fathers did not complete high school or had undergraduate college training only. (Those whose fathers completed high school but did not go to college, and those whose fathers had more than four years of college, are less interested than others in Army medical work.)

5. Summary of the characteristics of students interested in Army medicine: medical students interested in short-term work as a doctor in the Army have medical interests which are more specialized than general. They are interested in the problems in medicine--diagnosis and specialty practice--and are less bothered than the average by the prospect of paper work, record-keeping, and the like.

They see the Armed Forces and the Army as offering quality medical care and affording the doctor adequate case material and facilities both for his medical training and his practice.

They are likely to have relatives working in the health agencies; but parents in the medical profession or relatives working in the Navy or Air Force medical branches are influences against favoring an Army career.

Medical students inclined toward short-term Army work have favorable impressions of Army medicine from school associates, other medical men, formal and informal contact with Army personnel, their own military service; and, if married, have wives who are favorable to a career in the Armed Forces.

Interest in temporary Army work is greater among those who have not yet fulfilled their draft obligation and are looking about for the most advantageous way in which to satisfy that requirement. Among those who have already satisfied their service requirement, students with Army duty previously--already more familiar with Army rules and regulations and organization, or having a commission or longevity credit through prior service--are more inclined to be interested in working as an Army physician than are those who served in some other branch of the Armed Forces.

Medical students interested in temporary work in the Army are slightly more likely to have a relatively less privileged background than other students--in comparison to which medical work in the Army appears attractive and desirable.* This is not to say that the economically underprivileged medical students necessarily are more likely than others to stay in Army medicine for a long-term career. Men from relatively underprivileged families, who go into Army medicine, may leave the Army because they want to earn more money than is possible in an Army career.

* Janowitz and Wright, reporting on material from the Detroit Area study, point out the relationship between the prestige accorded to public employment and socio-economic status. In that study the less well-educated, the poorer, and the non-white respondents consistently rate public employment higher in prestige than do the better-educated, the wealthier, and racially-dominant group. The authors attribute these differences, in part, to the job security features of public employment. (Janowitz and Wright, op. cit., 21.)

Armed Forces medical recruitment literature appears to lay considerable emphasis upon economic advantages--financial security, pensions and retirement pay, early starting pay--in a military medical career. The findings of this study indicate that these economic advantages are widely known by medical students; but recognition of them appears not to be importantly related to interest in a career in Army medicine.

One reason for the limited effect of financial inducements may lie in the gap between students' expectations of their earnings in civilian medicine and their conception of the earnings of military medical men. It has been seen earlier that student estimates of the annual income of a thirty-year Army colonel compare unfavorably with their own expectations for income at height-of-career, and unfavorably, as well, with expectations of their earnings ten years out of medical school. Not all students will satisfy their earning expectations in civilian medicine, but they believe civilian medicine affords much greater financial opportunity to do so.

TABLE 59

Proportions of Students Interested in Army Medicine

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
Total students	(1086)	49%
<u>1. General professional attitudes or values:</u>		
Very important to make a good income	(167)	42*
Fairly important; not important	(918)	50
Very important to have opportunity to know patients well	(807)	48
Fairly important; not important	(275)	49
Very important to be able to establish one's own work hours	(173)	46
Fairly important; not important	(905)	49
Very important to meet diagnostic problems that are particularly challenging	(741)	50
Fairly important; not important	(341)	47
Very important to have enjoyable relationships with colleagues	(741)	49
Fairly important; not important	(343)	48
Very important to have patients who will appreciate one's efforts	(571)	49
Fairly important; not important	(513)	48
Very important to have prestige within the profession	(330)	51
Fairly important; not important	(752)	48
Very interested or somewhat interested in spending time in medical administration	(309)	52
Little or no interest	(771)	47
Very interested or somewhat interested in spending time in teaching	(909)	48
Little or no interest	(176)	52
Very interested in spending time in medical research	(229)	52
Somewhat interested	(442)	45
Not very interested	(219)	53
Not interested at all	(191)	49

* Percentages in this table are to be read horizontally--e.g., of the 167 students who say it is "very important" to them to make a good income, 42 per cent fall in the special group "most interested in Army medicine."

TABLE 59--Continued

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
2. <u>Opinions on Armed Forces and Army medicine:</u>		
Cited as an advantage in Armed Forces career--		
Economic security, pay, generally	(459)	50%
Shorter, more regular hours	(388)	51
Retirement provisions, pension	(210)	53
Good facilities, staff, program	(191)	58
Practice already set up or assured	(112)	45
Good starting pay, pay in early years	(95)	53**
Less responsibility, worry	(89)	43**
Cited as a disadvantage in Armed Forces career--		
Regimentation, limitation of individual	(802)	47
Adverse effects on family or personal life	(321)	57
Poorer facilities, program, case material	(263)	43
Lower pay than civilian practice	(231)	51
Nature of doctor-patient relationship	(203)	55
Have impression that career Medical Officers in Armed Forces tend to be different from civilian physicians	(636)	46
Do not have impression of difference	(403)	52
Think patients generally get better care in Army hospitals than in civilian hospitals	(280)	56
There would be no real difference	(482)	49
Generally poorer care in Army hospitals	(230)	41
Think Army doctors more closely supervised than civilians in patient care	(682)	51
There is little difference	(153)	44
Army doctors less closely supervised	(157)	51
Greater opportunity to qualify for Specialty Board certification in Army or civilian life--		
In the Army	(140)	55
No real difference	(244)	49
In civilian life	(580)	48

** These percentages are not very reliable, since they are based on relatively small numbers of cases in these particular categories.

TABLE 59--Continued

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
2. <u>Opinions on Armed Forces and Army medicine</u> (continued):		
Better chance to utilize special training and skills in Army or civilian life--		
As an Army physician	(52)	46%***
No real difference	(119)	55
As a civilian physician	(893)	47
Would have sufficient variety of cases to meet professional needs in Army--		
Would have sufficient variety	(422)	60
Would not	(561)	42
Amount that Medical Officers in Armed Forces have contributed to medical science--		
A great deal	(444)	51
Moderate amount; little or nothing	(621)	47
Interest in participating in Army Clinical Clerkship program--		
Very interested, or a participant	(270)	62
Somewhat interested	(425)	52
Not interested at all	(383)	36
Interest in participating in Army Senior Medical Student program--		
Very interested, or a participant	(152)	74
Somewhat interested	(330)	56
Not interested at all	(599)	38
Interest in participating in Army Internship program--		
Very interested, or a participant	(203)	69
Somewhat interested	(452)	53
Not interested at all	(428)	33
Interest in participating in Army Residency program--		
Very interested	(64)	84**
Somewhat interested	(339)	60
Not interested at all	(675)	39

TABLE 59--Continued

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
3. Sources of impressions about Army medicine:		
Relatives who are or were doctors in service	(201)	48%
Not from this source	(885)	49
Other relatives who are or were doctors	(120)	43
Not from this source	(966)	49
Other relatives who were in service	(435)	48
Not from this source	(651)	49
Medical students	(630)	50
Not from this source	(456)	46
Medical school faculty members	(443)	50
Not from this source	(643)	48
Reserve officers on duty with Army Medical Corps	(346)	51
Not from this source	(740)	48
Regular Army Medical Corps officers	(381)	52
Not from this source	(705)	46
Other physicians student has known	(595)	48
Not from this source	(491)	50
Student's own military service	(198)	40
Not from this source	(888)	50

TABLE 59--Continued

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
<u>4. Background or personal characteristics:</u>		
Class in medical school--		
Freshman	(286)	48%
Sophomore	(280)	47
Junior	(271)	45
Senior	(249)	54
Estimate of class standing in medical school--		
Top quarter	(280)	48
Second quarter	(460)	47
Third quarter	(275)	49
Fourth quarter	(60)	55**
Plans for general or specialized practice--		
Plans to have a general practice	(271)	48
Plans to specialize to some extent	(153)	56
Plans to take a residency	(617)	47
Estimate of chances of military duty--		
Almost certain to go	(830)	52
Only fairly certain; not at all certain	(249)	38
Anticipated difficulty of getting along financially until established in medical career--		
Very difficult	(130)	47
Fairly difficult	(696)	50
Not difficult at all	(256)	45
Earnings during current school year--		
None	(577)	51
Less than \$50 per month	(207)	51
\$50 to \$99 per month	(165)	39
\$100 per month or more	(137)	47
Married	(375)	51
Not married	(711)	48
Wife working	(225)	49
Wife not working	(150)	52
Married, children	(165)	49
Married, no children	(210)	51

TABLE 59--Continued

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
4. <u>Background or personal characteristics (continued):</u>		
Never served in the Armed Forces	(912)	51%
Served in the Navy, Marines, Air Force	(82)	28**
Served in the Army	(89)	42**
Served in some Armed Forces Medical Corps	(66)	29**
Served in non-medical branch of Armed Forces	(105)	39
Holds no Reserve or National Guard commission now	(960)	48
Holds Reserve or N.G. commission in another service	(58)	31**
Holds Army Reserve or National Guard commission	(59)	68**
Participation in pre-medical R.O.T.C. training--		
Took advanced R.O.T.C. training	(132)	50
Took only basic R.O.T.C.	(267)	47
College had R.O.T.C., but student took none	(479)	48
College had no R.O.T.C. program	(206)	52
No government assistance in medical or pre-medical training		
	(897)	51
Some government assistance (G.I. Bill, other)	(175)	36
Favorite leisure-time activities--***		
Individual participant sports	(582)	50
Team participant or spectator sports	(438)	51
Active arts (playing music, painting)	(110)	47
Passive arts (listening to music, watching TV, etc.)	(570)	47
Games	(84)	46**
Hobbies, collections	(127)	51
Social occasions	(304)	48
Reading	(502)	46
Participation in high-school or pre-medical school sports programs--***		
Sports involving single competitors, requiring bodily contact (wrestling, boxing, etc.)	(84)	44**
Team competition, likely to involve bodily contact (football, etc.)	(698)	48
Single competitor or partners, not requiring bodily contact (tennis, etc.)	(208)	42
Team competition, not requiring bodily contact	(599)	48
Single or partnership participation, not necessarily involving competition (swimming, golf)	(243)	48
Did <u>not</u> participate in any sports	(174)	52

*** The individual leisure-time or sports activities add to more than the total number of students because some participated in more than one leisure-time activity or sport.

TABLE 59--Continued

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
4. <u>Background or personal characteristics (continued):</u>		
Whether student has any close living relative who is or has been--		
A physician:		
Parent	(135)	42%
Brother, sister	(59)	44**
Other close relative	(294)	53
Some close relative (parent, brother or sister, other relative)	(413)	48
None	(673)	49
A dentist:		
Some close relative	(124)	56
None	(962)	48
A nurse:		
Some close relative	(325)	51
None	(761)	48
In some branch of the Army Medical Corps:		
Parent	(43)	40**
Brother, sister	(38)	66**
Other close relative	(145)	53
Some close relative (parent, brother or sister, other relative)	(214)	52
None	(872)	48
In some <u>other</u> branch of the Army:		
Some close relative	(533)	51
None	(553)	46
In some branch of the Navy Medical Department:		
Some close relative	(82)	44**
None	(1004)	49
In some <u>other</u> branch of the Navy:		
Some close relative	(315)	50
None	(771)	48
In some branch of the Air Force Medical Service:		
Some close relative	(32)	41**
None	(1054)	49
In some <u>other</u> branch of the Air Force:		
Some close relative	(205)	55
None	(881)	47

TABLE 59--Continued

<u>Area of inquiry</u>	<u>No. of students giving response</u>	<u>Most interested in Army medicine</u>
4. <u>Background or personal characteristics (continued):</u>		
Whether student has any close living relative who is or has been-- (continued)		
In some kind of medical work in the VA:		
Some close relative	(64)	48%**
None	(1022)	48
In the U.S. Public Health Service:		
Some close relative	(36)	58%**
None	(1050)	48
Kind of work father does (did):		
Professional, semi-professional	(416)	47
Farmer, farm manager	(47)	49%**
Proprietor, manager, official (non-farm)	(386)	51
Clerical, sales work	(96)	40%**
Craftsman, foreman, or similar work	(74)	49%**
Father in a salaried position	(532)	47
Father in a self-employed position	(492)	49
Working father's net income last year:		
Under \$5,000	(151)	52
\$5,000 to \$7,499	(224)	51
\$7,500 to \$14,999	(263)	46
\$15,000 or more	(206)	44
Father's education:		
Eighth grade or less	(221)	52
Some high school	(110)	56
Completed high school	(148)	43
Some college	(159)	52
Completed college	(143)	51
More than four years college	(292)	44

APPENDIX

A. THE SAMPLE

The population for this study was defined as medical students potentially subject to Selective Service -- male citizens who would be less than 33 years of age upon graduation from medical school -- and classified as "in school" in the central files of the Association of American Medical Colleges in early April, 1956. Three of the 83 approved medical schools were excluded from the population on the following grounds: location outside the continental United States, not in operation long enough for full accreditation, and a women's college.

The sample of students was drawn in two stages.

1. Drawing of schools: The 80 schools were stratified by major census regions and, within each region, by public or private financing. In one of the eight strata (publicly-financed Southern schools), the schools were arranged additionally according to the 1950 ratio of active practising M.D.'s to the population of the state where the school was located. In the other strata, schools were ordered to provide maximum distribution among cities and between church-supported and other schools. Forty-four schools were selected through systematic sampling of the various strata. Each student in the population had an equal opportunity of being selected for interviewing.
2. Drawing of students: Selection of individual students in each of the 44 schools in the sample was effected by arranging students' names by class in school and alphabetically within class and then drawing every nth name. The drawn sample consisted of 1,256 names. One hundred and forty-two of the total were subsequently found to be ineligible on the basis of sex, age, non-citizenship, or school status; the sample of eligible students thus consisted of 1,114 names.

Interviews were completed with 1,086 of the 1,114 eligible students. Fourteen students refused to be interviewed, and fourteen others were unavailable during the period of the study, May 1956. The rate of completion was 97.5 per cent of the eligible cases.

The tables below present comparisons of some of the characteristics of the interviewed sample with medical students in the base population. In no instance do percentages for the two groups differ by more than three points.

Comparison of population[#] and sample

<u>Region of residence</u>	<u>Population</u>	<u>Interviewed sample</u>
New England.	6%	5%
Middle Atlantic.	25	23
South Atlantic	13	14
East North Central	19	18
East South Central	6	9
West North Central	9	10
West South Central	9	7
Mountain	3	4
Pacific.	8	9
Foreign.	2	1
	<u>100%</u>	<u>100%</u>
 <u>Pre-medical education</u>		
2 years college, no degree . . .	*%	1%
3 years college, no degree . . .	25	28
4 or more years, no degree . . .	6	4
B.A., A.B.	37	39
B.S.	28	25
M.A., M.S.	3	2
Other degrees; unascertained. .	1	1
	<u>100%</u>	<u>100%</u>
 <u>Class in school</u>		
First year medical school. . . .	27%	26%
Second year medical school . . .	25	26
Third year medical school. . . .	24	26
Fourth year medical school . . .	24	22
	<u>100%</u>	<u>100%</u>
Number of students.	(25,350)	(1,086)

[#]Male citizens, less than 33 years of age at time of graduation from medical school, "in school" in April, 1956.

Concerning the statistical reliability of the findings in this report: the percentages based on the total of 1,086 students would, in 95 instances out of 100, not vary more than about four percentage points, through chance alone,* from the percentages that would have been obtained on the same questions if all students in the base population had been interviewed. The reliability of the findings on smaller sub-groups in the sample would be less than for the total sample. As an illustration, in a comparison of a finding for the 286 freshmen with findings for the 249 seniors in the sample, a difference of about 11 percentage points would be required to justify the assertion that the odds are 95 out of 100 that the difference did not arise through chance.

These statements of statistical reliability are based on the most conservative comparison: where the observed distribution of response on a question would be 50-50. Where the distribution is other than 50-50, a smaller difference would be required for significance at the five per cent level.

*The question of statistical reliability is separate from the question of biases which might have arisen in the wording of the questions, in interviewing, or in the subsequent analysis of the data. In no survey can such biases be measured with precision. Every effort was made, however, to keep such biases to a minimum. In passing, it should be noted that, to avoid one source of possible influence upon responses, the sponsorship of the study was not revealed to students.

B. BACKGROUND INFORMATION ON MEDICAL STUDENTS

Certain data on the background characteristics of this national sample of medical students are presented in this section. The data will serve two purposes: provide perspective on students' opinions and attitudes on medical issues as described earlier and furnish "sample census" information on medical students.

In most instances data are given for students in each of the four classes and for the total. The numbers of students are as follows:

Freshmen	-	286
Sophomores	-	280
Juniors	-	271
Seniors	-	249
Total	-	1086

Did you take part in any sports in high school or in pre-med school?
Which sports?

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Sports with --					
Single competitor, requiring bodily contact	8%	9%	6%	7%	9%
Team competitor, likely to involve bodily contact	64	63	66	64	64
Single competitor or partners, not requiring bodily contact	19	18	20	21	17
Team competitor, not requiring bodily contact	55	58	58	53	51
Single participant or partners, not necessarily involving competition	22	21	24	22	22
Miscellaneous	2	1	2	2	3
No sports	<u>16</u>	<u>16</u>	<u>13</u>	<u>16</u>	<u>19</u>
Some mention more than one	186%	186%	189%	185%	185%

Have you earned any money during the current school year? About how much a month, on the average?

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
No earnings during this school year	53%	72%	59%	43%	35%
Earnings averaging less than \$50 per month	19	19	22	19	15
Averaged \$50-\$99 per month	15	6	9	23	24
Averaged \$100-\$149 per month	8	2	5	11	13
Averaged \$150 per month or more	5	1	5	4	13
No answer	*	-	-	-	*
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

About how much will you be in debt, if at all, at the end of this school year -- that is, how much will you have to repay sooner or later?

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
No debt	63%	71%	62%	62%	56%
\$1 to \$500	6	7	8	4	6
\$500 to \$999	4	4	5	4	2
\$1000 to \$1999	8	9	7	8	7
\$2000 to \$2999	6	5	6	6	6
\$3000 to \$4999	4	*	6	5	7
\$5000 to \$6999	3	1	2	2	6
\$7000 and over	2	*	2	3	5
No formal debt but feels obligation	4	3	2	5	5
No answer	*	*	-	1	-
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Are you single or married?

Are you engaged?

	Total	Fr.	So.	Jr.	Sr.
Married	34%	21%	29%	36%	55%
Divorced, separated, widowed	1	1	*	1	*
Single	65	78	71	63	45
Engaged	14	15	16	14	11
Not engaged	50	63	54	49	34
No answer on engagement . .	1	*	1	-	-
	100%	100%	100%	100%	100%

How long have you been married?

	Total	Fr.	So.	Jr.	Sr.
Not married	66%	79%	71%	64%	45%
Married less than 1 year .	9	7	9	9	12
Married 1 to 2 years . . .	11	5	10	11	18
Married 3 to 5 years . . .	11	8	8	11	17
Married 6 or more years . .	3	1	2	5	7
Married, length unascertained	*	-	-	-	1
	100%	100%	100%	100%	100%

Do you have any children?

	Total	Fr.	So.	Jr.	Sr.
Not married	66%	79%	71%	64%	45%
Married, no children . . .	19	11	18	18	29
Married, 1 child	11	6	8	13	18
Married, 2 or more children	4	4	3	5	7
Married, number of children unascertained	*	-	*	*	1
	100%	100%	100%	100%	100%

Is your wife working at present?

	Total	Fr.	So.	Jr.	Sr.
Not married	66%	79%	71%	64%	45%
Married, wife not working .	14	11	10	14	22
Married, wife working . . .	20	10	19	22	33
Married, wife's work unascertained	*	-	*	-	*
	100%	100%	100%	100%	100%

Occupation of wife of student

	Total	Fr.	So.	Jr.	Sr.
Not married	66%	79%	71%	64%	45%
Wife not working	14	10	10	14	22
Wife working --					
Professional, semi-professional (except nurse)	10	6	9	10	16
Nurse	3	1	2	3	5
Proprietor, manager, official	*	-	-	1	1
Clerical, sales	7	4	7	8	10
Operative	*	-	*	-	-
Service worker	*	-	1	*	1
Not ascertained	*	-	-	*	-
	100%	100%	100%	100%	100%
Wife in medically-related occupation other than nurse . .	4%	2%	4%	6%	6%

Which Service were you in?

	Total	Fr.	So.	Jr.	Sr.
Not in service	84%	83%	86%	85%	81%
Army	8	9	9	7	8
Navy	5	3	3	4	8
Air Force	2	4	1	2	2
Marines	1	*	*	1	1
Coast Guard	-	-	-	-	-
No answer	*	1	1	1	-
	100%	100%	100%	100%	100%

Did you serve in the Medical Corps (Department) or not?

	Total	Fr.	So.	Jr.	Sr.
Not in service	84%	83%	86%	85%	81%
Medical	6	7	5	6	8
Other	10	10	9	9	11
No answer	*	*	*	*	-
	100%	100%	100%	100%	100%

Did you serve as an officer, or as an enlisted man?

	Total	Fr.	So.	Jr.	Sr.
Not in service	84%	83%	86%	85%	81%
Officer	4	6	5	2	2
Both	1	-	1	1	1
Enlisted	11	11	8	11	16
No answer	*	*	*	1	-
	100%	100%	100%	100%	100%

What was your grade or rank at the time you got out of the Service?

	Total	Fr.	So.	Jr.	Sr.
Not in service	84%	83%	86%	85%	81%
(Army, Air (Navy, Force, Coast Marines) Guard)					
Captain or Lieutenant higher . or higher	*	-	-	*	1
First Lieutenant . Lieutenant J.G. . . .	3	5	4	1	*
Second Lieutenant . Ensign . . .	1	*	1	1	1
Enlisted, above Corp. Enlisted, P. O. . .	7	6	4	7	10
Enlisted, Corp. or lower . . Enlisted, Seaman . .	5	5	4	5	7
No answer	*	1	1	1	-
	100%	100%	100%	100%	100%

How many years' service do you have for pay (longevity) purposes, including all active duty and reserve time in either officer or enlisted status?

	Total	Fr.	So.	Jr.	Sr.
No active or reserve duty	84%	82%	86%	86%	80%
No longevity time	*	1	*	-	-
Less than one year	*	-	-	1	1
One year	1	1	1	*	2
Two years	4	4	3	4	7
Three years	3	4	2	3	3
More than three years	8	8	8	6	7
	100%	100%	100%	100%	100%

Did you get any of your medical or pre-med training through government assistance, such as the G.I. Bill or some Armed Forces program?

	Total	Fr.	So.	Jr.	Sr.
No government assistance in training	83%	82%	84%	85%	78%
G.I. Bill	14	15	13	11	17
Clinical Clerkship Training Program	*	-	-	1	1
Senior Medical Student Program	*	-	-	*	2
Some other government program	2	1	2	2	3
No answer	1	2	1	1	1
	100%	100%	100%	100%	100%

Do you hold a Reserve or National Guard commission now? In which branch of service?

	Total	Fr.	So.	Jr.	Sr.
No commission	89%	89%	86%	89%	90%
Army	5	5	8	5	4
Navy	3	3	4	3	4
Air Force	2	2	1	2	2
Marines, Coast Guard	*	-	*	*	-
No answer	1	1	1	1	*
	100%	100%	100%	100%	100%

Was there an R.O.T.C. program of any kind at the college(s) where you took your pre-medical training? Did you have any basic or advanced R.O.T.C. training in college?

	Total	Fr.	So.	Jr.	Sr.
No R.O.T.C. program at my pre-med college	19%	15%	17%	23%	22%
Took both basic and advanced R.O.T.C. training	12	13	16	11	8
Took basic R.O.T.C. training only	25	35	25	19	19
College had R.O.T.C. but I took none	44	37	42	47	50
No answer	*	-	-	-	1
	100%	100%	100%	100%	100%

Do you have any close relatives, still living, who are or have been:

Physicians?					
	Total	Fr.	So.	Jr.	Sr.
No, none	62%	65%	63%	60%	59%
Yes, some*	38	35	37	40	41
Parent	12	11	12	14	12
Brother, sister.	5	3	5	7	6
Other close relative	27	26	24	28	30
	100%	100%	100%	100%	100%

Dentists?					
	Total	Fr.	So.	Jr.	Sr.
No, none	88%	92%	88%	86%	86%
Yes, some*	12	8	12	14	14
Parent	1	1	2	1	1
Brother, sister.	1	1	1	1	2
Other close relative	10	6	9	12	11
	100%	100%	100%	100%	100%

Nurses?					
	Total	Fr.	So.	Jr.	Sr.
No, none	70%	71%	66%	70%	73%
Yes, some*	30	29	34	30	27
Parent	6	6	6	7	4
Brother, sister.	6	5	8	4	6
Other close relative	21	20	21	22	20
	100%	100%	100%	100%	100%

In some branch of the Army Medical Service?					
	Total	Fr.	So.	Jr.	Sr.
No, none	80%	81%	80%	78%	82%
Yes, some*	20	19	20	22	18
Parent	4	2	5	5	3
Brother, sister.	4	4	4	3	3
Other close relative	13	13	14	14	12
	100%	100%	100%	100%	100%

In some <u>other</u> branch of the Army?					
	Total	Fr.	So.	Jr.	Sr.
No, none	51%	46%	51%	53%	54%
Yes, some*	49	54	49	47	46
Parent	7	7	8	9	4
Brother, sister.	12	12	9	12	14
Other close relative	36	39	35	34	35
	100%	100%	100%	100%	100%

* NOTE: Since some students have close relatives in more than one category, sub-totals may add to more than the "Yes" category.

In some branch of the Navy Medical Department?

	Total	Fr.	So.	Jr.	Sr.
No, none	92%	92%	91%	93%	93%
Yes, some*	8	8	9	7	7
Parent	1	-	1	1	1
Brother, sister.	2	2	2	3	2
Other close relative	5	6	6	4	4
	100%	100%	100%	100%	100%

In some other branch of the Navy?

	Total	Fr.	So.	Jr.	Sr.
No, none	70%	70%	71%	70%	71%
Yes, some*	30	30	29	30	29
Parent	4	5	3	5	1
Brother, sister.	6	6	6	7	7
Other close relative	20	21	22	19	21
	100%	100%	100%	100%	100%

In some branch of the Air Force Medical Service?

	Total	Fr.	So.	Jr.	Sr.
No, none	97%	96%	98%	97%	96%
Yes, some*	3	4	2	3	4
Parent	*	*	*	1	2
Brother, sister.	1	1	*	1	2
Other close relative	2	3	2	1	-
	100%	100%	100%	100%	100%

In some other branch of the Air Force?

	Total	Fr.	So.	Jr.	Sr.
No, none	80%	82%	76%	83%	81%
Yes, some*	20	18	24	17	19
Parent	1	2	*	*	2
Brother, sister.	5	3	6	3	6
Other close relative	14	14	18	14	11
	100%	100%	100%	100%	100%

In some kind of medical work in the Veterans Administration?

	Total	Fr.	So.	Jr.	Sr.
No, none	94%	93%	95%	93%	95%
Yes, some*	6	7	5	7	5
Parent	2	2	1	2	1
Brother, sister.	1	1	1	*	*
Other close relative	4	4	3	5	4
	100%	100%	100%	100%	100%

* See preceding footnote.

In the U.S. Public Health Service?

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
No, none	96%	96%	96%	96%	97%
Yes, some*	4	4	4	4	3
Parent	1	1	1	1	1
Brother, sister.	1	1	1	-	1
Other close relative	2	2	2	3	1
	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Is your father living? Is he working, or retired?

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Father still living and working.	79%	79%	84%	76%	75%
Father living; is retired	8	7	5	11	8
Father is deceased	<u>13</u>	<u>14</u>	<u>11</u>	<u>13</u>	<u>17</u>
	100%	100%	100%	100%	100%

What kind of work does (did) your father do?

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Professional, semi-professional.	38%	38%	41%	41%	33%
Farmer, farm manager	4	5	4	4	5
Proprietor, Manager, official (except farm)	36	35	32	36	39
Clerical, sales.	9	9	9	7	10
Craftsman, foreman, kindred worker	7	7	6	5	8
Operative.	3	4	2	5	3
Service worker	1	1	2	*	1
Laborer.	1	*	3	1	1
No answer.	<u>1</u>	<u>1</u>	<u>*</u>	<u>1</u>	<u>-</u>
	100%	100%	100%	100%	100%
Father is or was physician	13%	11%	12%	16%	14%
Father is in other medically-related occupation.	6	6	8	5	6

Is (was) that a salaried, or a self-employed, position?

	<u>Total</u>	<u>Fr.</u>	<u>So.</u>	<u>Jr.</u>	<u>Sr.</u>
Salaried	49%	50%	55%	45%	46%
Partly salaried.	5	6	4	6	6
Self-employed.	<u>46</u>	<u>44</u>	<u>41</u>	<u>49</u>	<u>48</u>
	100%	100%	100%	100%	100%

* See preceding footnote.

Which one of these general groups best fits your estimate of your father's income for last year? (Asked of those whose fathers are both living and working)

	Total	Fr.	So.	Jr.	Sr.
Under \$2500 net income	2%	1%	2%	3%	3%
\$2500-\$4999.	15	14	17	14	16
\$5000-\$7499.	26	27	31	25	19
\$7500-\$9999.	15	15	14	14	15
\$10,000-\$14,999.	15	15	16	15	16
\$15,000-\$24,999.	14	15	8	21	12
\$25,000 or more.	10	10	8	6	15
Unascertained.	3	3	4	2	4
	100%	100%	100%	100%	100%
Number of students	(873)	(231)	(239)	(212)	(191)
Median annual income: \$8440.					

What was the last grade or class that your father completed in school?

	Total	Fr.	So.	Jr.	Sr.
Completed 0-4 years.	3%	3%	2%	5%	2%
Completed 5-6 years.	4	3	4	4	4
Completed 7-8 years.	14	13	13	14	15
Completed 9-11 years	10	11	10	7	12
Completed 12 years	14	13	14	15	13
Completed 1-3 years college.	14	16	16	12	14
Completed 4 years college.	13	12	16	14	10
More than 4 years college.	27	28	24	28	28
No answer.	1	1	1	1	2
	100%	100%	100%	100%	100%

In which field did you major as a college undergraduate?

	Total	Fr.	So.	Jr.	Sr.
Pre-medical, specified	22%	16%	22%	25%	23%
"Science"	4	6	3	5	4
Biological sciences.	34	34	35	32	37
Physical sciences.	22	24	22	22	21
Humanities	3	3	2	3	2
Social sciences.	7	8	6	5	8
Other.	7	8	8	7	4
No answer.	1	1	2	1	1
	100%	100%	100%	100%	100%

C. DESCRIPTIONS OF THE FOUR ARMY MEDICAL TRAINING PROGRAMS

The following summaries of the four Army medical training programs were shown to students after the questions on knowledge of the program and opinions of the advantages and disadvantages in them, and prior to the questions on interest in participating and suggestions for changes in the program.

Summary of the Army Clinical Clerkship Training Program

1. Selected applicants hold commissions as Second or First Lieutenant, Medical Service Corps, U.S. Army Reserve. They receive full pay and allowances for those ranks, plus travel expenses, for a six-week active duty period during the summer preceding the senior year in medical school.
2. PLACE:
7 Army teaching hospitals in the United States.
3. SUBJECTS:

Military medicine and other military instruction.	1 week
Internal medicine and subspecialties.	2½ weeks
Surgery and subspecialties.	<u>2½ weeks</u>
Total	6 weeks
4. FEATURES:
 - a. One hour daily instruction at the junior-senior level designed to fit the available clinical material.
 - b. Attendance at the teaching exercises for hospital residents and interns.
 - c. Clinical patient care, under staff supervision.
5. The Clinical Clerkship Program in itself does not involve any extra obligation for military service. Participation fulfills "summer camp" requirements for Army Reservists.

Summary of the Army Senior Medical Student Program

1. Selected applicants receive commissions and serve on active duty as Second Lieutenants, Medical Service Corps, U.S. Army Reserve, throughout their senior year in their own medical schools.
2. Pay and allowances as Second Lieutenants:
 - Minimum - With dependents, \$355.68 per month
 - Without dependents, \$290.70 per month*
3. Students pay their own tuition and fees.
4. No military duties during senior year.
5. Obligations:
 - a. Participation in National Intern Matching Plan.
 - b. Acceptance of Reserve commission as First Lieutenant, Army Medical Corps, upon graduation.
 - c. Three years' active duty as Captain in the Army Medical Corps upon completion of internship.
6. Participation completes the present two-year requirement under the Universal Military Training and Service Act.

*The correct minimum for Second Lieutenant without dependents is \$338.58; the \$47.88 subsistence allowance was inadvertently omitted from the above total.

Summary of the Army Internship Program

1. PLACE:

One of eight large Army hospitals in the U.S. and Hawaii, beginning on July 1, each year.

2. Meets all requirements of the Council on Medical Education of the AMA.

TRAINING:

Surgical Service, including
Urology and Orthopedics 3 months

Medical Service, including
Internal Medicine and
Contagious Disease 3 months

Pediatrics 2 months

Obstetrics and Gynecology 2 months

Electives (Laboratory,
Ophthalmology, Otolaryngology,
Radiology, Psychiatry and
Neurology, Physical Medicine) 2 months

Total 12 months

3. The intern receives additional training in electives if required by his State Board.

4. Rank of Army Interns - First Lieutenant,
Medical Corps Reserve.

Pay: Without dependents, quarters
furnished \$ 307.24 per month

With dependents, quarters
not furnished \$ 401.44 per month

Additional benefits: Uniform allowance and transportation
expenses paid by the Army

5. Those who are liable for military service under present Selective Service criteria are required to serve in the rank of Captain for two years, exclusive of prior service, upon completion of their Army internship.

Summary of the Army Residency Program

1. PLACE:

Large Army hospitals in the U.S. and Hawaii.

2. SPECIALTIES:

- a. 22 Specialties and Subspecialties.
- b. Residencies fully approved by the various American Specialty Boards.

3. DURATION:

1 to 5 years formal residency training, as for comparable civilian residencies.

4. TRAINING:

- a. Supervised by diplomates of American Specialty Boards.
- b. Prominent civilian specialists participate.
- c. Weekly clinical and pathology conferences.
- d. Bimonthly tumor clinics.
- e. Patients of both sexes and all ages.
- f. Opportunity for supervised research in second year.

5. MILITARY ASPECT:

- a. Selected applicants are commissioned in the Regular Army Medical Corps.
- b. The Army Residency normally fulfills all Selective Service and "Doctor Draft" obligations.
- c. The Army Resident must stay in service as a medical officer one additional year for each year of his residency.
- d. Pay and allowances as Captain - Medical Corps:

Minimum - With dependents, quarters
not furnished \$ 575.00 per month

Without dependents,
quarters furnished \$ 473.00 per month