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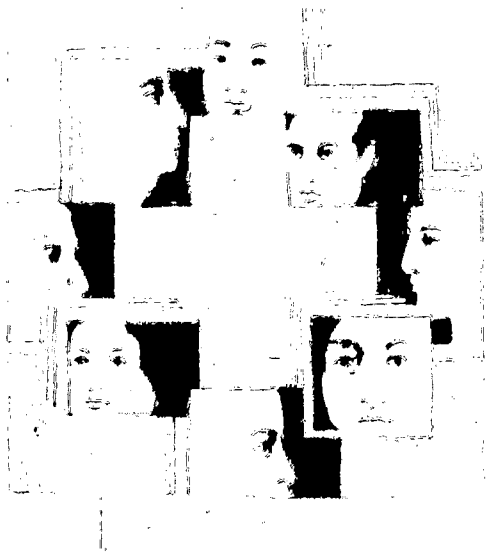
ABSTRACT

Highlights of the findings from a three phase study are presented in the report. Data were drawn from annual surveys, beginning in 1966, of the entire entering freshman classes at a national sample of higher education institutions and from followup studies, at subsequent intervals, of smaller subsamples of the same students. The growing popularity of the health fields of study, gains and losses in specific fields, and the impact of changing enrollment patterns are described. Health career aspirants are compared to nonhealth aspirants, and trends in the characteristics of health aspirants over a six-year period are identified. Patterns associated with stability in, recruitment to, and defection from a major in the health fields are focused on in reference to health majors. A final section profiles aspirants to specific health careers (physicians, dentists, nurses, laboratory technicians, and therapists) with emphasis on those who planned to become physicians. The report concludes that such factors as demographic attributes, socioeconomic backgrounds, academic ability, self-image, values, and institutional characteristics play an influential role in student choices of probable major, actual major, career, and specialty within a career. Appended are selected statistical tables (24 tables) for each of the study's three phases. (Author/MS)



Health Manpower References

TRENDS AND CAREER CHANGES OF COLLEGE STUDENTS IN THE HEALTH FIELDS

A SUMMARY REPORT ON A STUDY CONDUCTED BY THE AMERICAN COUNCIL ON EDUCATION POLICY ANALYSIS SERVICE

FINAL REPORT OF CONTRACT NO. M1-24399

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service

Health Resources Administration

Bureau of Health Resources Development

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PREFACE

Reflecting its broad legislative responsibility to support health manpower education and training for meeting the Nation's needs for an adequate supply of qualified health manpower, the Bureau of Health Resources Development has long had a vital interest in the process of student career choice. Students who are in the Nation's colleges and universities are the potential manpower resources that someday will man our health care system. There is thus a vital need to know more about both the process of health manpower training and the people in its various stages—whether recruit, applicant, student, graduate, and practitioner. A host of questions need to be answered about the young men and women who aspire to enter service in a health field. How many are there? Who are they? What are their characteristics? What are their backgrounds? What are their fields of study and career choice? Do they persist in their initial career choices? Who drops out along the way? What help do they need? What can the Federal Government do to help?

In order to answer some of these questions, the Bureau of Health Resources Development in 1972 initiated a study to measure and describe the talent pool of undergraduate college students who are preparing for careers in health-related fields. Through an investigation of the characteristics of college students who plan and select careers in health fields, it was hoped that some light could be shed on the dynamics of career choice in the health field. The American Council on Education (ACE), which maintains a comprehensive data bank containing a wide variety of longitudinal information on college students, was selected by the Bureau to conduct the study.

The research program of ACE is the largest ongoing national study of the American higher educational system. It currently involves the annual collection and analysis of data from approximately one-third of a million freshman students enrolled at a representative national sample of about 500 institutions—junior colleges, senior colleges, and universities—with periodic followups of subsamples of former freshmen. The data include biographic and demographic information (e.g., sex, racial/ethnic, and religious background, parents' education and income), high school activities, and life goals. Furthermore, followup data are collected on earlier entering freshman cohorts. The followup data include a reassessment of information originally collected at the time of entry to college (e.g., degree plans, field and career choices) as well as additional information on such areas as college experiences and educational persistence. Thus, the ACE offered a unique large-scale data base from which to determine trends over time in the types of students selecting various health-related fields and careers, to perform analyses of change over time within single cohorts of undergraduate students, and to validate original freshman career choices.

The study undertaken by ACE was divided into three phases. Phase I was an anlysis of the career changes of college students in the health fields. The purposes of the study were 1) to determine the attractiveness of different health fields to college freshmen, 2) to compare the characteristics of students planning on a health career with those in other disciplines, 3) to investigate the changes in study fields and career plans made by students during their undergraduate years, 4) to compare the characteristics of students changing fields, and 5) to assess and evaluate factors related to these changes. These analyses were performed using biographical and career choice data collected from the 1967 entering freshman college class compared with their later responses in a 1971 followup survey. These data were used to determine the constellation of background factors, attitudes and value systems, types of study fields, and other college environment factors which attract and retain students in health-related fields. Using data from the 1967 freshman survey and the 1971 followup, students who remained in health-related fields were identified and compared with those who had left or entered the health-related fields.

Phase II of the study was an analysis of the historical trends in the health career choices of college freshmen and their characteristics. This part of the study examined questionnaire responses from the freshman college classes of 1966, 1968, 1970, and 1972 in order to investigate trends in the selection of career choices and in other student characteristics. These analyses described and assessed the changing interests of freshman students aspiring to health careers and their characteristics.

The last part of the study, Phase III, was an analysis and evaluation of the validity of the health career choices made by undergraduate students in order to determine to what extent later career decisions correlated with earlier stated career plans and choices. This phase of the study used data from a 5-year longitudinal study of the cohort of 1966 college freshmen, resurveyed in 1970 and again in 1971, to ascertain how many

1966 freshmen and 1970 seniors had applied for or entered, by the fall of 1971, professional schools or occupations in health-related fields. Factors of student home-background and other characteristics which might be associated with career progressions were also investigated indepth in order to understand better the dynamics of health professional school choices. Thus, all three phases of the investigation of the career choices and decisions of college students served to illuminate the processes which channel and mold young men and women into active professional health manpower.

This report contains a description of all three phases of the ACE study and presents some of its more significant findings. A special feature is the profiles of each of the five most popular health career occupational groups, as compared with the total group of health-career aspirants. A set of selected tables from each of the three phases of the study are presented in the appendixes. These tables were selected to be representative of the type of data available from the study and therefore were not keyed directly to the text of this report. The tables are intended to give the reader a feeling for the panoply of data available and to be illustrative of the type of analyses performed. Copies of the final technical report for each phase of the study will be available in the near future for those readers interested in the methodology, the technical details of the study, the complete set of data tables, or a fuller and more detailed analysis of the data.

This report is primarily the Executive Summary of the study as submitted to the Bureau of Health Resources Development by Dr. [redacted] of the Policy Analysis [redacted] Dr. [redacted] of the Bureau's Resource Analysis Staff, [redacted] was the Project Officer for the [redacted] the Executive Summary for publication.

Requests for further information concerning the study should be addressed to the Resource Analysis Staff, Office of the Bureau Director, Bureau of Health Resources Development, Health Resources Administration, 9000 Rockville Pike, Building 31, Room 3B05, Bethesda, Maryland 20014.

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INTRODUCTION

The American Council on Education (ACE) conducted in 1973-74 a three-phase study for the Bureau of Health Resources Development on the trends and career changes of college students in the health fields. Data were drawn from ACE's Cooperative Institutional Research Program, which annually since 1966 has surveyed the entire entering freshman classes at a national sample of higher education institutions and has followed up, at subsequent intervals, smaller subsamples of the same students.

The first phase of the study was based on approximately 1.3 million first-time, full-time freshmen enrolled in 1967 who were followed up 4 years later, in 1971. In conducting the analyses these freshmen were categorized into several groups. The *health aspirants* comprised all those who, on the freshman questionnaire, said that they planned to major in one of the following fields: Biology, biochemistry, biophysics, botany, zoology, other biological sciences, health technology (medical, dental, laboratory), nursing, pharmacy, predentistry, premedicine, preveterinary medicine, and therapy (occupational, physical, speech). Comparisons were made between this group and *nonhealth aspirants*, defined as those 1967 freshmen who named some other field as their probable major, plus the 5 percent who were undecided as to major field or who gave no response. In addition, *health majors* (all those who, in the 1971 followup survey, reported that they had actually majored in a health field) were compared with *nonhealth majors* (all those who, in 1971, reported that they had majored in some other field). Finally, some of the factors related to stability of choice (of a major in a health field) were identified and evaluated.

In the second phase of the study, the entering-freshman classes of 4 different years—1966, 1968, 1970, and 1972—were examined (a) to assess similarities and differences between health aspirants (a group that increased from 190,304 freshmen in 1966 to 300,172 freshmen in 1972) and nonhealth aspirants[1] for each year under investigation and (b) to detect changes over the 6-year period in the institutional distribution and the characteristics of health aspirants. In addition, analyses were carried out by sex and by race (Black and non-Black).

The third and final phase of the study used a 5-year longitudinal data base of 1966 freshmen, followed up first in 1970 (4 years after college entry) and again in 1971 (5 years after college entry). This phase differed from the first two in that it focused on career choice rather than study field major. A total of 89,547 respondents to the 1970 followup survey named as their probable career one of the following: dentist, dietician or home economist, laboratory technician or hygienist, nurse, optometrist, pharmacist, physician, therapist, or veterinarian. The characteristics of these *health-career aspirants* were examined. In addition, those respondents to the 1971 followup who indicated that they planned to become physicians were described in detail. Within the *physician-aspirant group*, recruits (those who had named another career choice in 1970) were compared with stables (those who had named physician as their career choice both in 1970 and 1971), and those who planned to go into family practice were compared with those interested in other specialties.

The following sections present some of the highlights of the findings from all three phases of the study.[2] The first section, The Overall Picture, describes what has been happening in the health fields themselves: their growing popularity as a group relative to other study fields; gains and losses in specific health fields and their relation to trends in the demography of college students; and the impact of changing enrollment patterns on shifts in particular health fields. In the second section, Who Plans to Major in the Health Fields, health aspirants are compared with nonhealth aspirants, and trends in the characteristics of health aspirants over a six-year period are identified. The third section, Who Actually Majors in the Health Fields, focuses on health majors, with particular reference to patterns associated with stability in, recruitment to, and defection from a

[1] The total group of nonhealth aspirants ranged from 1,245,989 in 1966 to 1,341,100 in 1972. For purposes of our analyses, however, only a 10-percent random sample of nonhealth aspirants for each year was used in the comparisons.

[2] More detailed information for interested readers is available in the following technical reports:

Engin I. Holmstrom, "Trends and Career Changes of Students in the Health Fields: A Comparison with Other Disciplines—Phase I Technical Report" (Washington: Policy Analysis Service, American Council on Education, 1973).

Engin I. Holmstrom and Nancy Cohen, "Trends and Career Changes of Students in the Health Fields: A Comparison with Other Disciplines—Phase II Technical Report" (Washington: Policy Analysis Service, American Council on Education, 1974).

Engin I. Holmstrom, "Trends and Career Changes of Students in the Health Fields: A Comparison with Other Disciplines—Phase III Technical Report" (Washington: Policy Analysis Service, American Council on Education, 1974).

major in the health fields; in addition, some of the factors related to stability of choice are isolated and evaluated. The final section, Profiles of Health-Career Aspirants, takes a close look at aspirants to specific health careers, particularly at those who planned to become physicians.

THE OVERALL PICTURE

One of the notable findings to emerge from the study is that the health fields suddenly became more popular in 1972. In 1966, 1968, and 1970, they attracted a steady 12 or 13 percent of entering freshman; then in 1972, the figure jumped to 18.3 percent—an increase over 1966 of 58 percent in the absolute number of entering freshmen naming a health field as their probable major. A cursory look at data from the 1973 freshman survey suggests that this sharp increase may represent the beginning of a trend. Moreover, the rise in the popularity of the health fields is paralleled by a similar rise in the popularity of other preprofessional and paraprofessional college majors, reflecting a burgeoning interest in vocational and career training and an intensifying emphasis on the "practical" as opposed to the "academic." In short, the attitudes and expectations of students entering colleges and universities in the 1970's contrast markedly with those of their counterparts in the 1960's.

The economic recession and the tight job market are often cited as factors contributing to the new orientation toward job-related postsecondary education. Another important, though less widely recognized factor is the changing demographic structure of the undergraduate student population: The rapid development of the junior college system, coupled with the emergence of the national goal of equal educational opportunity, has worked to bring larger proportions of Blacks and of women into higher education, and both these groups appear to be strongly attracted to the allied health and professional health fields.

Gains and Losses in Specific Health Fields

The increased representation of Blacks and of women in the college population may partly explain the changes in the popularity of specific health fields. In the 6 years covered by the study (1966-72), the following significant shifts in the distribution of aspirants among the different health fields occurred:

1. Majors in fields leading to paraprofessional careers (i.e., therapy and health technology) gained considerably in popularity, particularly among Blacks. Moreover, the number of men planning to major in these dominantly "feminine" fields increased substantially. Similarly, the number of men planning to go into nursing—also considered a "woman's profession"—registered a startling increase of 236 percent (although the actual numbers remained relatively small); similarly the increase in the number of Blacks who named nursing as their probable major was 294 percent.
2. Of the three major study fields leading most directly to careers in the health professions—predentistry, premedicine, and preveterinary medicine—only the first showed a decline in the number of students attracted, and this decline occurred only among men and non-Blacks. Preveterinary medicine registered an overall increase of 111 percent in the absolute number of freshmen naming these fields as their probable major. Though still a small minority of students planning careers in the health professions, substantially more women and more Blacks were choosing these fields in 1972 than in 1966.
3. Generally, both the numbers and the proportions of freshmen planning to major in the academic health disciplines of biology, biochemistry, biophysics, and zoology declined between 1966 and 1972. On the other hand, the category of "other biological sciences" registered increases, as did botany (except among Black health aspirants).

Effects of Changing Enrollment Patterns

As was pointed out above, changes in enrollment patterns—especially the unprecedented expansion of enrollment in public 2-year colleges over the past 20 years—may help to explain shifts in the popularity of specific health fields. In 1966, one out of four freshman health aspirants initially enrolled in a 2-year college. Though the proportion of nonhealth aspirants enrolling in 2-year colleges increased similarly, the enrollment patterns of the two groups differed in that, among health aspirants, the offsetting decrease occurred in university enrollments, whereas among nonhealth aspirants, enrollments in both 4-year colleges and universities dropped. The decline in university enrollments may in part account for the relatively slow growth rate of premedicine, a major field that is generally offered only at universities. The increased enrollments in 2-year colleges may also account for the greater popularity of the allied health fields, though these fields were also popular among 4-year college entrants.

WHO PLANS TO MAJOR IN THE HEALTH FIELDS

This section focuses on those students who, when they entered college as freshmen, indicated that they planned to major in a health field. We will look first at how these health aspirants compared with nonhealth aspirants (i.e., students who, as freshmen, indicated that they would probably major in a nonhealth field) and then at how the characteristics of health aspirants among entering freshmen classes changed over the 6 years covered by the study.

Health Aspirants vs. Nonhealth Aspirants

A comparison of health aspirants and nonhealth aspirants in the five freshman classes under investigation (1966, 1967, 1968, 1969, and 1970) shows that the two groups were much alike in their demographic characteristics, except that the proportion of women in the health-aspirant group was equal to the proportion of men, whereas men outnumbered women in the nonhealth aspirant group. The modal entering freshman in each group was 18 years old, white and Protestant; came from a middle-income family (annual income of $10,000-$14,999); and had parents who were high school graduates. (About two-fifths of the students in both groups had parents with at least some college education.)

Among men, health aspirants were substantially more likely than were nonhealth aspirants to come from families with annual incomes of $15,000 or more and to have college-educated parents. (Twice as many had fathers who had earned an advanced degree.) In addition, from 4 to 6 percent of the male health aspirants, but only 1 percent of the male nonhealth aspirants, had fathers who were physicians. Male health aspirants also tended to be superior to male nonhealth aspirants in academic achievement, as measured by both high school and college grades, and were more likely than were male nonhealth aspirants to receive a baccalaureate within 4 years after college entry. These socioeconomic and academic differences between men in the two groups were almost entirely attributable to the large proportions of male health aspirants who planned to become health professionals (i.e., dentists, physicians, veterinarians). That is, students aiming for health professional degrees tended to come from more affluent and educated families and to have better academic records than did other male health aspirants.

Among women, nonhealth aspirants were slightly more likely to come from high-income backgrounds, but were were no differences between the two groups with respect to parents' education. Female health aspirants were superior in academic ability to their male counterparts and about equal to female nonhealth aspirants. They were less likely, however, to attain a baccalaureate within 4 years after college entry, probably because of the large proportion who were interested in nursing and health technology—occupations where employment is possible without a bachelor's degree.

As would be expected, the two groups differed considerably in their goals and expectations, though some goals were common to both: for instance, developing a meaningful philosophy of life, having a stable and secure future, working with people rather than with things, becoming an authority on a special subject, and being a success in one's own business. Health aspirants were more service- and science-oriented: They placed a high value on helping others, being useful to society, and making a contribution to science; they were more likely to see themselves working in a hospital or clinical setting, engaged primarily in serving patients and doing research. Nonhealth aspirants, on the other hand, gave greater emphasis to artistic goals (e.g., becoming accomplished in a performing art, writing original works) and "materialistic" goals (being very well-off financially, becoming an expert in finance and commerce). They also placed a higher value of having administrative responsibility over others. They were more likely to expect to be employed in an educational institution or a business firm, engaged primarily in teaching or in administration.

Finally, health aspirants were more likely to enroll as freshmen in universities and in large and selective institutions than were nonhealth aspirants.

Trends in the Characteristics of Health Aspirants

The major significant change with respect to the demographic and background characteristics of successive groups of health aspirants between 1966 and 1972 was in their sex distribution and racial composition. In 1966, men outnumbered women (52 percent versus 48 percent), but by 1972 the balance had shifted in favor of women, who comprised 56 percent of the health-aspirant group. (Among nonhealth aspirants, the proportion of women remained fairly constant at about 42 percent.) The proportion of Blacks in both groups rose from 5 percent in 1966 to 8 percent in 1972. The number of Black women in the health-aspirant group increased by a startling 192 percent between 1966 and 1972, as compared with an increase of only 59 percent

in the number of Black male health aspirants. (Among Black nonhealth aspirants, the increase in absolute numbers was about the same for both sexes, approximately 90 percent.)

During the period covered by the study, entering freshman classes grew more liberal in their attitudes toward a variety of social and campus issues. That is, students entering college in 1972 were more likely than were earlier freshmen to take antiauthoritarian positions. This trend was universal and failed to differentiate between health aspirants and nonhealth aspirants.

Despite the changes in sex composition and racial distribution already noted, no notable shifts were observed with respect to life goals or career expectations.

WHO ACTUALLY MAJORS IN THE HEALTH FIELDS

In 1967, 13 percent of the entering freshman class stated that they would probably major in a health field; by 1971, only 9 percent had actually done so; these are referred to as *health majors*. Looked at in another way, 7 out of 10 students who, in 1971, reported majoring in a health field had been health aspirants as freshmen; these are termed *stables*. The other 3 in 10 of the health majors planned, as freshmen, to major in a nonhealth field (or were undecided or gave no response) but ended up majoring in a health field; these are the *recruits*. About one in three men and one in four women who initially planned to major in a health field failed to do so; these are the *defectors*. In this section, we will look at the patterns of change in relation to health fields and at factors contributing to stability of choice.

Patterns of Change

An examination of the specific health fields shows that premedicine, predentistry, and preveterinary medicine (all majors leading most directly to a health professional degree) suffered the greatest losses between 1967 and 1971, possibly because many institutions do not offer such majors, forcing aspirants to major instead in one of the biological or physical sciences. (Note that losses from these preprofessional majors do not necessarily imply a decrease in numbers planning to get a health professional degree or planning to become physicians, dentists, or veterinarians.) Biochemistry and biophysics also incurred fairly heavy losses. Indeed, the only health field that registered increases in absolute numbers of students were zoology, biology, and botany.

As has been pointed out, defection from an initial choice of a health field major was more common among men than among women. Defectors came from slightly higher socioeconomic backgrounds than did stables or recruits—a larger proportion reported that annual parental income was $20,000 or more and that their fathers had at least some college education. Students who had matriculated at highly selective institutions were more likely to defect. Defection from a health field was clearly related to poor academic performance. The overall college gradepoint averages of defectors were lower than those of recruits and stables, and defectors were more likely to report having failed one or more courses. Close to half the defectors shifted to a major in the social sciences (with education, psychology and sociology being their main choices), and about one in five to the arts and humanities. Despite their relatively poor academic records in college, defectors were more likely to complete the baccalaureate within 4 years after college entry.

Recruitment into a health field from a freshman choice of a nonhealth major was slightly higher among women than among men; but within the recruit group, men outnumbered women (55 percent vs. 45 percent). Students were more likely to be recruited into the health fields if they had matriculated at public institutions or at 2-year colleges. They were more likely than were either stables or defectors to have transferred or dropped out temporarily between 1967 and 1971. Perhaps partly as a result of delays occasioned by transferring or dropping out, they were less likely to get a baccalaureate within 4 years after college entry. The biological sciences and therapy (occupation, physical, speech) were the most successful of the health fields in attracting recruits.

Over half the stables had majored in biological sciences, and one-fifth had majored in nursing. Students were more likely to maintain their initial choice of a health field major if they had matriculated at a university. In addition, a higher proportion of stables than of recruits or defectors made B+ or better grade averages in high school and B or better grade averages in college.

Some of the differences among the three groups—differences that may help explain these patterns—are suggested by the relative priority that each gives to certain life goals and to reasons for choosing a particular career. Thus, stables were more likely to rank as essential or very important the goal of making a theoretical contribution to science, they were also more likely to cite as reasons for their career choice the chance to contribute to society and the availability of job openings. Recruits were more likely to value artistic accomplishment (in the performing arts and music) and to cite avoidance of a high-pressure job and a stable and secure future as goals. Defectors gave relatively high priority to the goals of having administrative responsibility over others, becoming an expert in finance and commerce, being very well-off financially, keeping up-to-date with political affairs, writing original works, having opportunities to be creative and original, and working with people rather than with things. They were more likely to cite as reasons for their career choice opportunities for rapid advancement and for freedom of action.

Other Factors Related to Stability

Women and older students were more likely than were men and younger students to carry through with their freshman plans to major in a health field. Freshman degree aspirations were also related to stability. Students initially aspiring to health professional degrees (M.D., D.D.S., D.V.M) were more likely to maintain their choice of a major in a health field, whereas those who, as freshmen, planned on a master's or a bachelor's degree were more likely to defect to nonhealth fields. In addition, those whose fathers were physicians were more likely to be stables. Certain sources of college finance (namely, "other" outside sources, teaching assistantships, Federal or State scholarships, and parental support) were associated with stability.

The college majors and careers that constitute the health fields are a heterogeneous lot (from biophysics through predentistry to dietetics and laboratory technology) and the groups of students lumped together, for purposes of the study, as health aspirants and health majors are widely divergent (ranging from men who plan to become physicians to women who plan to become speech therapists). Therefore, it seems very likely that our analyses failed to include all the possible relevant student characteristics and behaviors that may help to account for such outcomes as stability in or defection from a health field. Similarly, certain significant features of higher education institutions were probably not covered. For instance, we may safely surmise that majoring in a particular field is closely related to the availability of particular courses and fields of study. Further, and more subtly, the dominant vocational interests and major field choices of other students at a college or university may affect the individual's choice. Two-year colleges, for example, are particularly likely to emphasize vocational curricula such as nursing and the allied health professions. It is not surprising, then, that women who enter 2-year colleges (for whatever reasons) are attracted into these fields. Majors in predentistry, premedicine, and preveterinary medicine are more likely to be offered at large research universities than at small colleges; it follows, then, that students who enroll in universities will be more likely to major in these preprofessional health fields than will students who enroll in small colleges.

In confirmation of this hypothesis, analyses run separately on aspirants to a health professional degree showed that these students were more likely than were nonaspirants to attend private institutions, highly selective institutions, and universities. In addition, as was mentioned earlier, aspirants to a health professional degree were more likely to be male, to have highly educated parents, and to come from affluent homes. Further, their academic ability was high, and they were more likely to receive the degree within 4 years after college entry.

PROFILES OF HEALTH-CAREER ASPIRANTS

In 1970, 4 years after college entry, about 6 percent of all 1966 first-time, full-time freshmen named a health field as their career choice. Of the 89,547 health-career aspirants, 32 percent planned to become nurses, 21 percent physicians, 15 percent therapists, 11 percent laboratory technicians, 8 percent dentists, 5 percent dietitians, 5 percent pharmacists, 3 percent veterinarians, and 1 percent optometrists.

Looking at the total group, we find that women outnumbered men three to two. Nine of out 10 health-career aspirants were white, with Blacks constituting the largest minority group (6 percent). Over half the health-career aspirants were Protestant, 30 percent were Roman Catholic, 7 percent were Jewish, and 6 percent were raised in other religions. The modal health-career aspirant was 18 years old at matriculation, with only 7 percent 20 years of age or above. The median parental income level was $9,618, with 30 percent coming from families with less than $8,000 annual income and 22 percent from families with $15,000 or more annual income.

Health-career aspirants had, on the whole, a positive self-image, tending to give themselves high ratings on their understanding of others, academic ability, drive to achieve, cheerfulness, and intellectual self-confidence. On the other hand, fewer than one in four felt they were above average in artistic and mechanical ability or in political conservatism. Their belief in their abilities is, to some extent, justified by their baccalaureate completion rates and their college grade-point averages—53 percent completed the bachelor's degree within 4 years after college entry, and 60 percent made B or better averages.

Certain values and attitudes were common to all groups of health-career aspirants. Like their counterparts in nonhealth fields, they emphasized the goals of becoming an authority in a special subject in their field and keeping up-to-date with political affairs. Eight out of 10 health-career aspirants said that helping others in difficulty was important to them and that they were attracted to their career choice because it offered opportunities to be helpful to others and to work with people. Over one-third gave high priority to obtaining recognition from their colleagues for contributions to the field and being successful in their own business. They were more inclined than was the average college student to aim at making a theoretical contribution to science but less inclined to emphasize artistic achievements. Other major reasons cited by health-career aspirants for their choice were the chance to contribute to society, intrinsic interest, and the availability of job openings. About two in five were interested in high earnings. Relatively few mentioned rapid career advancement and freedom from pressure as factors influencing their choice.

The overall picture that emerges, then, is of a group of academically able and self-confident people with an orientation toward serving others. Nonetheless, there were some striking differences among the groups, particularly with respect to life goals and self-ratings. In the rest of this section, we will profile the five most popular health-career groups, comparing each to the total group of health-career aspirants. (The numbers choosing the other four careers were too small to permit generalization.) For simplicity's sake, those in the group are usually referred to by occupational title (e.g., "dentists" rather than "dentist aspirants" or "persons planning to become dentists"); the reader shall bear in mind, however, that inclusion in the group is based upon career *plans* as reported 4 years after college entry.

Physicians[3]

The modal physician aspirant was a white Protestant male (only 11 percent of the group were women), 18 years old at matriculation, from an affluent background (median parental income $12,180—higher than that of any other health-career aspirant group). Relatively large proportions of Oriental and Jewish students planned to be physicians.

Physicians were more likely than were other health-career aspirants to enroll as freshmen at private institutions. In addition, they tended to enter large, selective universities, most frequently located in the Northeast.

Being successful in his own business, making a theoretical contribution to science, becoming a community leader, helping others, and becoming an authority in his field were goals given high priority by the physician. He was less inclined than those in most other health-career groups to place value on having administrative responsibility or being very well-off financially.

The typical physician radiated self-confidence, being inclined to rate himself high on a variety of socially desirable attributes ranging from academic ability to originality. Much of this self-confidence seemed justified in that a larger proportion of physicians than of any other group of health-career aspirants made outstanding grades in college (overall average of B+ or better). Moreover, four out of five in this group had received

[3] 18,741 aspirants.

the baccalaureate within 4 years after college entry. Only 15 percent majored in premedicine. Half majored in biological sciences, and one-fifth in physical sciences. In addition, 9 percent majored in social sciences (usually psychology), and 5 percent in arts and humanities (usually English).

By 1971, over two-thirds of the physician aspirants were in medical school, most of them supported by their parents. Slightly over one in five had scholarship or fellowship support. One in three stated that, in the absence of adequate finances, they would be willing to take sizeable loans to continue in medical school. Of the relatively few who were employed (30 percent), most were working part time.

Relatively large proportions chose medicine as a career because of the autonomy it provides and because of their intrinsic interest in the field. Prestige and the chance to make an important contribution to society were other reasons frequently cited, whereas availability of jobs and high earnings were mentioned relatively rarely. One in three physicians expected to work in a small group medical practice, one in four to be self-employed, and one in 10 to be working in a hospital or clinic. The major work activity was expected to be service to patients, though many thought they would also spend much of their time in counseling, teaching, and research.

Family Practitioners vs. Other Specialists

Five years after college entry, 20,374 respondents to the 1971 followup survey named physician as their career choice. This represents a gain in absolute numbers of 8.7 percent in the 1-year interval between the two follow-ups of 1966 freshmen. Of this group of 1971 physician aspirants, over one-third (7,270) planned to go into family practice; the remainder were interested in other specialties. This section compares these two groups, who are referred to, for convenience, as *family practitioners* and *other specialists*.

The proportion of men was higher among family practitioners (93 percent) than among other specialists (84 percent). Although the modal students in both groups was white, Protestant, and 18 years old at matriculation, other specialties attracted larger proportions of Oriental, Roman Catholic, and Jewish students than did family practice. In addition, family practitioners tended to come from more affluent backgrounds (median parental income $12,421) than did other specialists (median income $11,992). Family practitioners were more likely to enroll as freshmen in public 4-year colleges of small size and medium selectivity located in the Southeast. Those interested in other specialties tended to enroll initially at selective private universities in the West-Southwest.

The two groups differed somewhat in their life goals and self-ratings. Though four out of five students in both groups gave high priority to helping others in difficulty, other specialists were inclined to rank as important or essential a greater number of goals. Moreover, their goals were more instrumental—being an authority in their special field, being very well-off financially, receiving recognition from colleagues, having administrative responsibility. In contrast, family practitioners gave high priority to expressive goals such as participating in an organization like Vista or the Peace Corps, becoming a community leader, keeping up-to-date politically.

Similarly, larger proportions of other specialists gave themselves high ratings on a number of traits, including academic ability, mathematical ability, mechanical ability, public speaking ability, sensitivity to criticism, and understanding of others. On only a few traits—athletic ability, originality, intellectual and social self-confidence—were family practitioners more inclined to rate themselves as above average. The high self-regard of other specialists was to some extent justified by their academic records. Close to half got B+ or better overall grade-point averages in college, compared with 40 percent of the family practitioners. Equal proportions (three in four) of each group completed the baccalaureate within 4 years after college entry.

In 1971, three in five out of each group were enrolled in medical school. Close to one in four of the family practitioners had scholarship or fellowship support, compared with only 17 percent of the other specialists. Family practitioners were more likely to have Federal loans, and other specialists to receive support from spouses or parents.

Other specialists were inclined to cite a greater number of reasons for their career choice, in particular job availability, high earnings, rapid advancement, and prestige. The opportunity for originality and ability to work with ideas were also mentioned by more of those interested in other specialties.

One in four students in each group planned to be self-employed. Over half of the family practitioners, but only three-fifths of the other specialists, said they would probably work in a small medical practice. Larger proportions of other specialists than of family practitioners planned to work in hospitals and clinics or in professional schools. Other specialists were also more likely to be undecided about their preferred long-term employer. Nine in ten aspirants in both groups expected to spend most of their time in service to patients; counseling was also seen as a major activity. Other specialists were more likely than were family practitioners to plan on doing research.

Dentists [4]

Dentistry was a male-dominated field, with only 2.5 percent women. It attracted relatively large numbers of Oriental and German-speaking students. Dental aspirants tended to come from fairly affluent families (median parental income $10,766) and to enter large (enrollment over 10,000) public universities located in the West-Southwest.

Judging by his self-ratings, the typical dentist had a very high regard for himself, particularly of his drive to achieve and of his mechanical ability. In addition, dentists tended to give themselves high ratings on academic ability, athletic ability, artistic ability, mathematical ability, originality, popularity, popularity with the opposite sex, and intellectual self-confidence. Despite this positive self-image, the college performance of dentists, as measured by grades, was no more than average. Further, only about half the dentists received the baccalaureate in 4 years, as compared with four-fifths of the physicians. Only 36 percent had actually majored in predentistry; two-fifths majored in biological sciences, mostly in general biology and zoology.

Relative to other health-career aspirants, dentists gave high priority to the goals of being successful in their own business, being very well-off financially, and keeping up-to-date with political affairs; they gave relatively low priority to helping others in difficulty. Consistent with this emphasis on materialistic as opposed to altruistic goals, dentists cited high earnings as their primary reason for choosing dentistry as a career; relatively few mentioned the opportunity to help others and to make an important contribution to society. The prestige of the profession and the autonomy it offered were other important factors influencing their career choice.

By 1971 (5 years after college entry), 72 percent of the dentists were enrolled in graduate or dental school, most of these having completed at least 1 year of advanced training. Federal loans were a source of support to 12 percent of the dentists enrolled in advanced training (as compared with only 3 percent of the total group of health-career aspirants in advanced training). Relatively large proportions were financing their advanced training through support from parents or other relatives and through withdrawals from savings. Only 1 in 10 had any kind of fellowship, scholarship, or other grant (as compared with one in four of the total group), and relatively few cited employment as a major source of support.

About half the dentists expected to be self-employed when they started practice, 16 percent saw themselves involved in a small group practice, and another 16 percent in a professional school.

Nurses [5]

Nursing is still predominantly a woman's field, with 94 percent female, usually white and of Protestant background, though sizable proportions of Blacks, Roman Catholics, and Polish-speaking people were also attracted. Nurse aspirants were more likely to be older than average in that 14 percent were over 21 at matriculation. Like laboratory technicians, they came from middle and lower socioeconomic levels (median parental income $9,301).

Nurses were more likely than were other health-career aspirants to have initially enrolled in 2-year colleges and in medium-sized public institutions of low selectivity located in the Midwest.

The average nurse was very modest in her self-ratings, particularly on mathematical and mechanical ability, academic ability, intellectual self-confidence, originality, popularity, and drive to achieve. Nonetheless, nurses were more likely than were aspirants in the other groups to rate themselves high on cheerfulness, and over three in four gave themselves superior ratings on understanding of others.

The goal of having administrative responsibility for the work of others was highly valued by most nurses, whereas the goals of making a theoretical contribution to science and becoming a community leader were given low priority.

The academic performance of nurses, as measured by college grades, was average. Their baccalaureate completion rate was rather low (one in three, four years after college entry), partly perhaps because of a tendency to drop out temporarily during the college years and partly because of enrollment in hospital diploma programs (about 9 percent of the group reported receiving some "other" degree by 1970).

Four in five nurses were employed at the time of the 1971 followups, most of them full time. About one in five was enrolled in school, but most of these were still undergraduates. One-third reported they were housewives. Though only 7 percent were enrolled in graduate or nursing school, one-third planned to enroll for advanced training at some time in the future. Those taking advanced training supported themselves principally through Federal scholarships and fellowships, earnings from employment, and commercial loans.

[4] 7,091 aspirants.

[5] 28,430 aspirants.

Relatively large proportions of nurses cited leadership opportunities and the availability of jobs as reasons for their career choice. Other common reasons were being able to work with people, having the opportunity to be helpful to others, the chance for steady progress, and making a contribution to society.

Most nurses expected to work in a hospital or clinic providing services to others. Other major job activities were teaching, administrative duties, and counseling.

Laboratory Technicians [6]

The modal aspirant to a career in laboratory technology was a white female (fewer than one in four were male) from a rather low-income family (median parental income $9,202). The field attracted larger proportions of Italian-speaking students and Roman Catholics than any other health career; in addition, the proportion of Orientals was fairly high.

Laboratory technicians were likely to enroll as freshmen in relatively unselective public institutions located in the Midwest of West-Southwest and in 4-year colleges rather than in universities.

Except on the rather dubious qualities of sensitivity to criticism, stubbornness, defensiveness, and political conservatism, laboratory technicians were consistently more likely than were other health-career aspirants to rate themselves as no more than average. They were particularly apt to give themselves low ratings on leadership, drive to achieve, popularity, and public speaking ability.

Three in four indicated that helping others in difficulty was an important life goal. Laboratory technicians also valued making a theoretical contribution to science, obtaining recognition from their colleagues, and writing original works but had little interest in being successful in their own business, keeping up-to-date with political affairs, or becoming community leaders.

The college grades of laboratory technicians averaged B or above (as was true for the total group of health-career aspirants), and about half received the baccalaureate within 4 years after college entry.

Health technology was the most common major (49 percent), followed by biological sciences (33 percent). In 1971, close to 9 out of 10 were employed, most of them full time. About one in four said they were housewives. Only 5 percent were taking advanced training, and most of these relied on commercial loans or earnings from employment for support. About one-third of the lab technicians said that, though they were not enrolled at the time of the 1971 followup, they planned to enroll for advanced training at some time in the future.

As reasons for choosing their career, laboratory technicians tended to cite the availability of jobs, high earnings, the chance for steady progress, the chance for career advancement, and the prestige of the occupation. Relatively few named leadership opportunities, the chance for originality, or autonomy. Over two in five expected to be working in a hospital or clinic, and another 14 percent in a medical group practice. Seven out of ten laboratory technicians saw service to patients as a major job activity; teaching, research, and administration were also named by sizeable proportions.

Therapists (Occupational, Physical, Speech) [7]

Women predominated in this field—only 13 percent of the aspirants were male. Although the modal therapist aspirant was white and Protestant, therapy attracted the largest proportion of Blacks of any health-career group, 12 percent. Like laboratory technicians and nurses, therapists came from rather low-income backgrounds (median parental income, $9,205). They were likely to enroll as freshmen in public 2-year and 4-year colleges of medium size (enrollment 2,500-9,999) located in the Southeast.

Relative to other health-career aspirants, therapists placed a high value on artistic goals, particularly on achievement in the visual arts (painting, sculpture), the performing arts, and creative writing. They were also more likely than any other group to cite helping people in difficulty as an important or essential goal. Winning recognition from colleagues for contributions in their special field was also important to them. On the other hand, therapists had little interest in being successful in a business of their own or having administrative responsibility over others.

Consistent with this picture of a rather artistically inclined and "other-oriented" person, the typical therapist rated herself high on artistic ability, public speaking ability, popularity (including popularity with the opposite sex), social self-confidence, and understanding of others. She gave herself low ratings on mathematical and mechanical ability.

In academic achievement, therapists ranked second of the health-aspirant groups, after physicians; almost two-thirds made college grade-point averages of B or better. Their baccalaureate completion rates were relatively high. Over three-fifths received the degree within 4 years after college entry. This record is particularly impressive when one considers that therapists had higher transfer rates than any other health-aspirant group and that transferring in the college years often leads to delays in degree completion. Seven in ten indicated an undergraduate major in therapy.

In 1971, almost three in four therapists were employed, most of them on a full-time basis. One-fifth were enrolled in graduate school, and close to half of this group

[6] 9,604 aspirants.

[7] 13,784 aspirants.

had scholarships or fellowships, usually from the Federal Government. Other major sources of support for advanced training were earnings from employment and withdrawals from savings; relatively few received parental support.

The reasons given by therapists for their career choice are consonant with their life goals and self-ratings. They were much more likely than were other health-career aspirants to cite opportunities for originality, for working with people and ideas, and for helping others that therapy provides. Relatively few mentioned leadership opportunities, high earnings, or prestige.

One in three therapists saw themselves employed in hospitals and clinics; close to 30 percent planned to work in educational institutions, especially at the elementary and secondary level. Serving patients was the major job activity envisioned by therapists, though a large proportion also planned to do counseling.

CONCLUSION

The analyses carried out in the course of this three-phase study make it clear that such factors as demographic attributes, socioeconomic background, academic ability, self-image, and values influence such outcomes as one's probable major, actual major, career choice, and choice of specialty within a career. For instance, health aspirants and nonhealth aspirants are much alike with respect to background characteristics except that male health aspirants are more likely than are male nonhealth aspirants to come from affluent backgrounds, to have college-educated parents, and to have fathers who are physicians. The two groups differ, however, in their life goals, with health aspirants emphasizing service and science goals and nonhealth majors emphasizing materialistic goals. Looking at the patterns related to actual major, we find that stables in health fields were more likely, as freshmen, to aspire to a degree in one of the health professions; moreover, their high school and college grades tended to be high. Recruits to the health fields were likely to be transfer students. Defectors from the health fields generally made rather poor academic records. Moreover, aspirants to particular health careers have distinctive qualities. For instance, those who, 4 years after matriculation, plan to become physicians and dentists come from more affluent backgrounds, are academically superior, and think highly of themselves. Laboratory technicians and nurses tend to come from poorer socioeconomic backgrounds and to have a low self-regard, particularly of their intellectual and academic qualities.

It is also clear that institutional characteristics play an influential role in the student's choices. Although our analyses focused only on the institution of matriculation (and it should be borne in mind that about one in four students transfers during the college years), and although we used only crude measures of institutional characteristics, definite patterns emerged. For instance, matriculation at a 2-year college is associated with recruitment into the health fields and with a probable career in nursing. Matriculation at a 4-year college is associated with defection from the health fields and with the career choices of therapist and laboratory technician (as well as with an interest in family practice, on the part of physicians). Matriculation at a university is associated with stability of choice of a health field major and with the career choices of physician and dentist (as well as with an interest in other specialties, on the part of physicians). These relationships can be explained, at least in part, by (a) the availability of, and emphasis given to, particular majors in certain kinds of institutions, and (b) pressures from the peer group and others in the college environment.

To return to the questions raised at the very beginning: It would seem that the manpower outlook in the health fields is bright. In recent years, there has been an impressive increase in the absolute numbers of students naming a health field as their probable major. The health fields that have grown particularly in popularity are "other" biological sciences, therapy, health technology, preveterinary medicine, nursing, botany, pharmacy, and premedicine.

In a way, the health fields epitomize many of the recent trends apparent through postsecondary education. Thus, the proportion of Blacks and of women have increased during the past several years, perhaps as a result of the new emphasis on equal opportunity and affirmative action. The sex stereotyping of various occupations seems gradually to be breaking down. Finally, the growing popularity of nursing and of the allied health professions and the declining interest (or slow growth rates) in some of the academic health fields reflect burgeoning student interest in career-related education.

APPENDIX A

Selected Tables — Phase I

Table I-1. Study field choices of 1967 freshmen in 1967 and 1971, by sex

Study field choice	1967			1971		
	Both sexes	Men	Women	Both sexes	Men	Women
Grand total	1,340,326	760,982	579,344	1,340,329	760,984	579,345
All health fields	171,518	85,396	86,122	123,518	58,609	64,909
Biology	25,135	14,942	10,193	37,732	26,728	11,004
Biochemistry	6,692	3,706	2,986	2,069	1,367	702
Biophysics	747	632	115	260	260	
Botany	1,082	906	176	1,417	1,145	272
Zoology	6,446	4,444	2,002	9,820	7,843	1,977
Other biological sciences	5,692	4,074	1,618	4,649	3,356	1,293
Health technology	19,377	3,243	16,134	14,837	2,480	12,357
Nursing	32,391	1,531	30,860	29,065	1,065	28,000
Pharmacy	6,465	5,016	1,449	3,909	3,064	845
Predentistry	13,020	12,107	914	2,303	1,926	377
Premedicine	36,469	28,547	7,922	6,046	5,135	911
Preveterinary	7,901	5,532	2,369	2,631	2,089	542
Therapy	10,100	716	9,384	8,780	2,151	6,629
Other fields	1,104,380	634,176	470,204	1,116,677	639,775	476,902
No answer/undecided	64,428	41,410	23,018	100,134	62,600	37,534

Note: These are weighted numbers. Figures may not add to totals and subtotals due to rounding.

Table I-2. Number of 1967 freshmen, by category of aspirant in 1971 and sex

Category of aspirant	Both sexes	Men	Women
Total	1,340,326	760,982	579,344
Stable	85,210	37,692	47,518
Recruit	38,306	20,916	17,390
Defector	86,305	47,703	38,602
Nonaspirant	1,130,505	654,671	475,834

Table I-3. Percent distribution of 1967 freshmen health aspirants and nonhealth aspirants by sex and characteristics of institution in which initially enrolled

Item	Health aspirants[1]			Nonhealth aspirants		
	Both sexes	Male	Female	Both sexes	Male	Female
Total	100.0	100.0	100.0	100.0	100.0	100.0
Race of student body:						
Predominantly White	97.0	96.8	97.3	97.1	97.7	96.3
Predominantly Black	3.0	3.2	2.7	2.9	2.3	3.7
Control of institution:						
Public	68.2	67.5	68.8	68.9	70.2	67.2
Private	31.8	32.5	31.2	31.1	29.8	32.8
Type of institution:						
University	30.6	38.7	34.5	27.6	28.9	25.8
4-year college	37.2	39.0	35.4	41.9	37.7	47.6
2-year college	26.2	22.3	30.1	30.5	33.4	26.6
Sex of student body:						
Male	3.6	7.0	0.1	5.2	8.9	0.1
Female	4.3	0	8.6	4.9	0.1	11.6
Coeducational	92.1	93.0	91.3	89.9	91.0	88.3
Geographical region[2]:						
Northeast	29.0	27.4	30.6	29.2	28.5	30.1
Midwest	29.5	27.7	31.2	31.3	31.3	31.3
Southeast	16.9	18.4	15.5	15.7	16.1	15.1
West-Southwest	24.5	26.4	22.7	23.9	24.1	23.5
Size of institution[3]:						
Below 200	0.3	0.1	0.6	0.4	0.5	0.3
200- 499	2.1	0.8	3.4	2.4	1.0	4.2
500- 999	9.3	7.7	10.8	9.9	9.4	10.6
1,000- 2,499	15.3	17.7	13.0	17.2	18.3	16.9
2,500- 4,999	19.8	20.5	19.1	22.6	22.4	23.0
5,000- 9,999	18.5	17.3	19.8	19.3	19.0	19.6
10,000-19,999	19.4	21.2	17.6	17.6	19.2	15.3
20,000 or more	15.2	14.6	15.8	10.2	10.2	10.1
Selectivity[4]:						
Under 89	9.8	9.1	10.5	10.9	11.0	10.9
89- 96	9.2	7.5	11.0	9.4	9.6	9.3
97-104	18.0	17.3	18.6	20.3	19.6	21.3
105-112	21.8	23.3	20.2	21.6	19.2	24.8
113-120	11.8	12.8	10.8	8.6	7.6	10.0
121-128	9.0	9.9	8.2	7.8	8.9	6.3
Over 128	5.5	6.7	4.2	4.0	4.3	3.6
Unknown	14.8	13.3	16.4	17.3	19.8	13.9

[1] Based on freshman study field choice.
[2] Regions consist of the following States:
Northeast—Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.
Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin.
Southeast—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, Canal Zone, Guam, Puerto Rico, Virgin Islands.
West-Southwest—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, Wyoming.
[3] The total full-time enrollment.
[4] The Median scores of entering freshmen on the ACT, the NMSQT, and the SAT composite.
Note: Percents may not add to 100.0 due to rounding.

Table I-4. Percent distribution of 1967 freshmen, by demographic characteristics, academic background, and enrollment status and category of aspirant in 1971

Student characteristic	Full-time[1]					Part-time[1]				
	Total	Stables	Recruits	Defectors	Non-aspirants	Total	Stables	Recruits	Defectors	Non-aspirants
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sex:										
Male	59.0	55.3	58.1	59.0	59.3	53.5	30.2	49.6	48.6	55.8
Female	41.0	44.7	41.9	41.0	40.7	46.5	69.8	50.4	51.4	44.2
Age:										
16 or younger	0.2	0.3	0.1	0.3	0.2	0.1	0	0	0.3	0.1
17	5.7	6.5	4.9	7.8	5.5	3.3	3.6	2.2	3.6	3.3
18	80.4	77.7	81.4	82.1	80.4	73.1	77.5	79.6	74.9	72.4
19	11.0	11.6	10.8	8.6	11.2	16.3	9.5	11.1	14.0	17.2
20	0.8	1.1	1.5	0.4	0.8	2.2	1.6	1.1	0.4	2.4
21	0.4	0.2	0.1	0.2	0.4	0.9	0.4	2.3	0.3	0.9
Older than 21	1.5	2.6	1.2	0.6	1.5	4.1	7.4	3.5	6.5	3.7
Race:										
Black	4.7	5.4	3.1	4.7	4.7	4.3	4.0	3.9	6.8	4.2
Non-Black	95.3	94.6	96.9	95.3	95.3	95.7	96.0	96.1	93.2	95.8
Religion reared:										
Protestant	53.1	54.5	58.9	55.2	52.6	52.7	48.6	47.7	52.7	53.2
Catholic	32.0	31.3	27.7	29.2	32.4	33.5	39.2	36.6	29.9	33.2
Jewish	7.5	7.8	8.1	9.7	7.3	3.4	3.4	3.6	7.2	3.1
Other	5.6	5.2	3.5	4.2	5.8	8.3	6.0	8.8	9.1	8.4
None	1.8	1.2	1.9	1.7	1.8	2.1	2.8	3.2	1.2	2.1
Father's education:										
Grammar school or less	9.5	12.0	7.9	8.4	9.4	13.8	13.7	9.2	13.5	14.0
Some high school	16.4	17.7	12.8	13.5	16.7	20.7	20.4	21.2	17.2	20.9
High school graduate	32.7	29.9	36.0	31.8	32.8	34.3	37.2	32.6	32.9	34.2
Some college	21.1	19.9	20.7	24.3	20.9	18.2	18.0	21.2	23.5	17.7
Postgraduate degree	20.3	20.4	22.6	22.0	20.1	13.0	10.7	15.8	12.9	13.1
Father's occupation:										
Artist (including performer)	0.9	0.5	0.5	1.1	0.9	0.8	0.5	0.2	0.7	0.8
Businessman	31.6	27.6	24.6	34.3	31.9	26.5	19.9	20.7	26.4	27.2
Clergyman	0.8	0.9	0.6	0.6	0.8	0.7	0.8	1.4	1.0	0.7
College teacher	0.8	0.7	0.6	0.6	0.8	0.5	0.1	0.4	0.8	0.5
Doctor (M.D. or D.D.S.)	2.3	5.7	5.3	5.5	1.8	1.4	2.9	4.0	3.1	1.0
Educator (secondary school)	2.3	2.3	3.4	2.3	2.2	1.6	1.0	2.6	1.3	1.6
Elementary school teacher	0.4	0.2	0	0.5	0.4	0.2	0.1	0	0	0.2
Engineer	6.6	6.6	6.8	5.7	6.6	6.8	7.0	9.8	8.1	6.6
Farmer or forester	6.1	5.7	7.1	4.5	6.2	7.1	7.2	7.0	4.5	7.2
Health professional (not-M.D. or D.D.S.)	1.2	2.3	1.4	2.0	1.0	0.8	0.5	2.3	0.4	0.9
Lawyer	1.6	1.2	0.8	1.4	1.6	0.5	0.2	0.7	0.6	0.5
Nurse	0.1	0	0.4	0.4	0.1	0.1	0.3	0.1	0	0
Research scientist	0.7	0.7	1.3	0.8	0.7	0.3	0.4	0.4	0.6	0.3
All other	44.7	45.5	47.2	40.2	44.9	52.8	59.1	50.3	52.4	52.4
Average grade in high school:										
A or A+	6.0	7.8	5.8	6.1	5.9	2.8	4.1	5.7	3.8	2.6
A−	10.5	14.6	11.0	11.8	10.1	4.9	5.9	5.2	5.2	4.8
B+	18.8	21.3	19.4	20.7	18.4	10.8	13.6	13.2	9.2	10.6
B	24.9	25.8	26.4	25.3	24.8	20.4	26.5	15.2	23.9	19.9
B−	15.3	12.2	12.9	15.7	15.6	16.7	21.9	21.3	13.7	16.3
C+	14.2	11.7	14.6	11.1	14.6	21.7	15.3	20.7	22.6	22.1
C	9.9	6.2	9.7	9.1	10.2	21.5	11.2	18.4	19.9	22.5
D	0.4	0.4	0.2	0.2	0.4	1.2	1.5	0.2	1.7	1.2

[1] Enrollment status in January-June 1971.
Note: Percents may not add to 100.0 due to rounding.

Table I-5. Percent distribution of 1967 freshmen, by concern about and source of college financing and enrollment status and category of aspirant in 1971

Item	Full-time[1]					Part-time[1]				
	Total	Stables	Recruits	Defectors	Non-aspirants	Total	Stables	Recruits	Defectors	Non-aspirants
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Concern about financing education:										
None	34.0	30.3	35.1	34.1	34.2	33.6	26.3	29.0	36.9	34.2
Some concern	58.5	62.8	59.5	58.5	58.1	57.3	63.7	62.4	53.6	56.9
Major concern	7.5	6.9	5.4	7.3	7.7	9.1	10.0	8.6	9.5	9.0
Major sources of financial support during freshman year:										
Personal savings or employment	25.2	24.1	26.7	23.7	25.4	31.5	24.3	34.3	33.8	31.9
Parental or family aid	58.1	57.9	59.4	62.2	57.7	51.2	55.2	52.0	51.0	50.9
Repayable loan	12.8	13.3	12.8	11.9	12.8	13.2	19.4	14.2	11.9	12.7
Scholarship/grant or other gift	18.0	19.1	16.2	14.8	18.2	14.0	15.4	14.0	14.7	13.8
Source of financing undergraduate years:										
Support from parents	76.0	78.3	75.9	78.1	75.7	53.0	59.8	61.9	54.2	52.1
Support from spouse	8.6	11.4	13.6	7.5	8.3	9.5	12.7	14.4	14.0	8.8
Federal scholarship, fellowship, or grant	11.7	14.0	11.5	9.7	11.7	7.7	12.1	11.0	7.7	7.2
State scholarship, fellowship, or grant	18.3	19.9	14.6	16.7	18.4	11.3	12.8	15.0	13.6	10.9
Other scholarship, fellowship or grant	19.7	21.4	18.5	19.5	19.6	11.5	18.5	13.5	11.7	10.9
Federal loan	22.4	22.6	25.7	21.6	22.3	14.1	18.2	13.0	15.2	13.7
Other loan	15.2	12.8	14.6	15.4	15.4	9.8	13.3	8.7	8.3	9.7
College work-study program	15.3	16.0	15.5	13.0	15.5	8.5	6.8	6.8	8.1	8.7
Research assistantship	0.7	1.3	0.7	1.3	0.6	0.2	0.2	0.2	0	0.2
Teaching assistantship	1.0	2.3	2.5	0.9	0.9	0.5	0.4	0.9	0.8	0.5
Employment	59.8	61.8	62.1	59.0	59.7	50.7	50.8	57.6	51.6	50.4
Other sources	35.5	36.2	38.3	34.9	35.4	29.6	38.6	32.6	26.5	29.0

[1] Enrollment status in January-June 1971.
Note: Percents may not add to 100.0 due to rounding.

Table I-6. Percent of 1967 freshmen undertaking various activities since entering college, by enrollment status and category of aspirant in 1971

Activities since entering college	Full-time[1]					Part-time[1]				
	Total	Stables	Recruits	Defectors	Non-aspirants	Total	Stables	Recruits	Defectors	Non-aspirants
Got married	22.2	22.9	27.5	21.7	22.0	43.5	45.4	40.2	48.1	43.2
Changed major field	45.7	23.0	74.0	74.9	44.0	34.8	19.6	50.1	51.6	34.3
Changed career choice	42.1	30.1	66.1	64.5	40.3	40.1	29.4	55.6	55.7	39.4
Failed one or more courses	33.8	26.5	30.6	40.4	33.9	37.1	28.7	45.1	35.7	37.6
Graduated with honors	15.1	17.7	13.7	14.7	15.0	6.0	7.3	8.2	8.6	5.7
Was elected to a student office	18.9	19.4	14.0	18.1	19.1	8.8	17.9	8.5	9.9	8.0
Joined a social fraternity, sorority, or club	41.2	37.8	38.4	45.1	41.3	21.0	24.2	22.8	24.1	21.1
Authored or co-authored a published article	7.5	5.7	4.3	8.6	7.6	4.0	2.8	6.8	4.5	4.0
Was elected to an academic honor society	16.9	19.9	16.9	14.1	17.0	5.9	9.1	8.2	7.6	5.4
Participated in student protests or demonstrations	30.2	25.3	27.4	35.5	30.2	12.9	13.1	18.0	14.7	12.6
Dropped out of college temporarily (excluding transfers)	14.4	12.9	17.1	14.4	14.5	46.0	34.4	51.6	48.7	46.6
Dropped out of college permanently	0.3	0.2	0.3	0.1	0.4	20.1	10.8	13.2	16.3	21.3
Transferred to another college before graduating	29.6	28.0	41.6	30.8	29.3	20.0	19.7	28.5	22.8	19.6

[1] Enrollment status in January-June 1971.

Table I-7. Percent distribution of 1967 freshmen, by 1967 and 1 971 career choices and enrollment status and category of aspirant in 1971

Career choice	Full-time[1]					Part-time[1]				
	Total	Stables	Recruits	Defectors	Non-aspirants	Total	Stables	Recruits	Defectors	Non-aspirants
All choices, 1967	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Accountant or actuary	2.6	0	1.6	0	3.0	2.8	0	0.8	0.7	3.3
Actor or entertainer	0.6	0	0.4	0.2	0.7	0.7	0	0.4	0	0.8
Architect	1.5	0	0.6	0	1.8	1.6	0	0.2	0	1.9
Artist	1.5	0	0.3	0.1	1.8	2.0	0	0.1	0	2.4
Business (clerical)	0.9	0	0.8	0.2	1.1	4.8	0.3	4.3	0.7	5.5
Business executive	5.9	0.4	2.6	0.5	6.9	6.2	0	5.9	0.8	7.1
Business owner or proprietor	0.8	0	0.6	0.1	1.0	1.0	0	0.3	0.3	1.2
Business salesman or buyer	0.6	0	0.5	0	0.7	1.0	0	0.1	0	1.2
Clergyman (minister, priest)	0.8	0.1	0.3	0.1	0.9	0.5	0	0	0	0.6
Clergy (other religious)	0.3	0.1	1.2	0	0.3	0.3	0.2	0	0	0.4
Clinical psychologist	1.2	0	2.4	0.1	1.3	0.8	0.4	0.2	0.4	0.9
College teacher	1.4	0	2.8	0.5	1.5	0.8	0.3	1.6	0.2	0.9
Computer programmer	1.7	0	1.4	0	2.0	3.0	0	1.4	0	3.5
Conservationist or forester	1.0	2.4	2.4	2.0	0.8	1.2	2.0	3.2	0.7	1.1
Dentist	1.5	10.7	0.6	11.1	0.1	0.9	4.3	1.5	8.4	0
Dietitian or home economist	0.7	0	2.0	0.3	0.8	0.6	0	1.1	0	0.7
Engineer	10.4	0.1	10.2	0.3	12.0	9.5	0	4.8	0.1	11.1
Farmer or rancher	0.9	0.1	0.4	0.3	1.0	1.1	0	0.8	0.5	1.2
Foreign service worker (incl. diplomat)	1.5	0	2.0	0.1	1.7	0.8	0	1.6	0	0.9
Housewife	0.6	0.5	0.8	0.5	0.6	1.3	0.5	2.0	0.8	1.4
Interior decorator/designer	0.8	0	0.1	0	0.9	1.1	0	1.2	0	1.2
Interpreter (translator)	0.7	0	0.9	0	0.8	0.5	0	1.2	0	0.6
Lab technician or hygienist	1.0	8.0	1.4	4.7	0.2	1.9	13.6	3.2	10.1	0.4
Law enforcement officer	0.3	0	0.1	0	0.3	0.7	0	0	0.1	0.9
Lawyer	4.0	0	2.4	0.5	4.6	1.7	0	1.5	0.2	2.0
Military service (career)	1.0	0	0.7	0.6	1.2	1.1	0	3.7	1.1	1.1
Musician (performer, composer)	0.8	0	1.0	0.1	0.9	0.8	0	0.8	1.0	0.9
Nurse	1.5	17.3	0.3	6.1	0	3.9	39.6	1.6	16.8	0.2
Optometrist	0.1	0.8	0	0.3	0	0.1	0	0	0.1	0.1
Pharmacist	0.5	3.3	0.2	4.0	0	0.5	2.7	0.5	5.3	0
Physician	3.7	24.5	3.5	26.3	0.4	1.6	11.2	1.1	12.0	0.1
School counselor	0.4	0	0.3	0	0.4	0.3	0	0.3	0	0.3
School principal/superintendent	0.1	0	0	0	0.1	0.1	0	0.4	0	0.1
Scientific researcher	3.6	11.7	11.2	8.6	2.3	1.6	6.1	3.3	4.8	1.0
Social worker	2.6	0.4	2.0	0.4	2.9	2.2	0	2.5	0	2.6
Statistician	0.2	0	0	0	0.2	0.1	0	0	0	0.1
Therapist (phycical occupational, speech)	0.9	4.6	0.6	5.8	0.2	0.8	2.4	0.4	8.8	0.2
Teacher (elementary)	9.2	0.1	10.1	1.7	10.5	7.7	0.1	6.6	1.1	8.8
Teacher (secondary)	13.4	4.5	12.6	6.5	17.0	12.0	3.2	14.4	4.3	13.2
Veterinarian	0.8	3.7	0.6	5.5	0.2	0.7	4.0	1.3	5.9	0.1
Writer or journalist	1.7	0.2	0.6	0	2.0	1.3	0	0.5	0	1.6
Skilled trades	0.4	0	0	0	0.4	1.3	0.2	0	0	1.6
Other	3.7	2.6	2.5	2.9	3.8	6.8	6.1	10.9	5.3	6.9
Undecided	10.2	3.8	15.0	9.6	10.5	10.0	2.9	14.7	9.6	10.4
All choices, 1971	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Accountant or actuary	2.6	0	0	1.8	2.9	2.8	0.5	0	2.8	3.1
Actor or entertainer	0.3	0	0	0.2	0.4	0.5	0	0	0	0.5
Architect	1.0	0	0	0.7	1.1	0.8	0	0.3	0	0.9
Artist	1.7	0.1	0	1.6	1.9	1.7	0.2	0.5	0.9	1.9
Business (clerical)	0.7	0	0.1	0.3	0.8	6.7	3.2	2.4	3.7	7.3
Business executive	7.5	0.9	0.5	6.9	8.3	4.6	2.1	0.3	7.0	4.8
Business owner or proprietor	2.1	0.6	0.4	2.0	2.2	3.8	0.9	2.0	2.1	4.2
Business salesman or buyer	1.6	0	0.1	1.2	1.8	2.2	0.4	2.2	2.2	2.4
Clergyman (minister, priest)	0.6	0.3	0.1	0.9	0.6	0.3	0	0	0.2	0.3
Clergy (other religious)	0.3	0	0.4	0.3	0.4	0.3	0.2	0.1	0	0.3
Clinical psychologist	1.5	0.1	0	3.2	1.5	0.9	0	0.1	2.1	0.9
College teacher	4.4	2.4	3.6	4.8	4.6	1.5	0.5	1.4	2.2	1.5
Computer programmer	1.0	0.1	0.3	0.3	1.2	2.1	0	0.2	0.8	2.4
Conservationist or forester	0.9	3.1	5.1	0.9	0.7	0.9	1.3	3.0	0.4	0.8
Dentist (incl. orthodontist)	0.7	7.7	3.4	1.6	0.1	0.5	2.5	3.8	1.1	0.1
Dietitian or home economist	0.4	0	0.1	0.8	0.5	0.4	0	0	2.0	0.4
Engineer	5.6	0	0	0.8	6.6	4.2	0.6	0.9	3.0	4.7
Farmer or rancher	0.8	0.3	0.8	1.3	0.8	1.9	1.2	1.8	1.1	2.0

Table I-7. (Continued)

Career choice	Full-time[1]					Part-time[1]				
	Total	Stables	Recruits	Defectors	Non-aspirants	Total	Stables	Recruits	Defectors	Non-aspirants
Foreign Service worker (incl. diplomat)	0.4	0	0	0.7	0.4	0.1	0	0	0.2	0.1
Housewife	1.3	0.4	1.0	0.6	1.4	10.8	10.8	6.9	12.7	10.8
Interior decorator/designer	0.3	0	0.1	0.1	0.4	0.4	0	0	0.4	0.4
Interpreter (translator)	0.1	0	0	0	0.1	0.2	0	0	0.2	0.2
Lab technician or hygienist	0.7	7.4	5.7	0.7	0.1	1.7	11.1	8.6	2.5	0.6
Law enforcement officer	0.5	0.1	0	0.2	0.6	1.4	0.1	0.6	1.3	1.5
Lawyer	5.1	0.1	0.3	7.3	5.4	1.7	0	0.7	0.7	1.9
Military service (career)	1.1	0.7	0.2	1.0	1.2	0.6	0.5	0	0.6	0.7
Musician (performer, composer)	0.6	0.1	0.1	0.4	0.6	0.9	0	0	0.2	1.0
Nurse	1.6	19.6	8.7	1.3	0.1	3.6	30.8	16.5	7.1	0.6
Optometrist	0	0.5	0.2	0.1	0	0.1	0	0	0.1	0.1
Pharmacist	0.4	3.7	3.5	0.6	0.1	0.3	2.8	0.9	0.6	0
Physician	2.3	18.5	10.8	6.6	0.6	0.9	6.2	3.5	2.3	0.3
School counselor	1.0	0.2	0	1.6	1.1	0.4	0	0.2	0.2	0.5
School principal/superintendent	0.4	0.5	0	0.3	0.4	0.1	0	0	0.1	0.1
Scientific researcher	2.4	8.1	12.1	3.0	1.6	1.2	4.5	6.4	0.5	0.8
Social worker	3.2	0.2	0.5	5.6	3.3	1.9	0.4	1.1	2.8	2.0
Statistician	0.2	0	0	0	0.3	0.1	0	0	0.2	0.1
Therapist (physical, occupational, speech)	1.3	6.8	16.8	0.7	0.5	0.7	1.0	7.5	1.6	0.3
Teacher (elementary)	12.4	0.2	2.7	11.3	13.7	5.8	2.0	0.6	6.7	6.3
Teacher (secondary)	15.0	6.8	9.9	12.6	16.0	6.6	1.7	6.7	5.2	7.1
Veterinarian	0.3	1.7	2.9	0.7	0	0.4	2.0	0.6	0.1	0.2
Writer or journalist	1.9	0.1	0	1.5	2.1	0.9	0.1	0.2	0.4	1.0
Skilled trades	0.6	0.6	0	0.3	0.7	6.6	2.2	2.6	6.9	7.2
Other	5.9	3.1	5.3	7.0	6.1	9.0	6.3	7.6	7.2	9.4
Undecided	6.9	4.9	4.3	6.3	7.2	7.6	3.9	9.9	7.2	7.9

[1] Enrollment status in January-June 1971.
Note: Percents may not add to 100.0 due to rounding.

Table I-8. Percent distribution of 1967 freshman M.D. aspirants and non aspirants, by characteristics of institution in which initially enrolled

Item	Freshman choice			Senior choice		
	Total	M.D.	Non-M.D.	Total	M.D.	Non-M.D.
Total	100.0	100.0	100.0	100.0	100.0	100.0
Race of student body:						
Predominantly White	97.1	95.0	97.2	97.1	94.1	97.2
Predominantly Black	2.9	5.0	2.8	2.9	5.9	2.8
Control of institution:						
Public	68.8	60.3	69.3	68.8	59.3	69.1
Private	31.2	39.7	30.7	31.2	40.7	30.9
Type of institution:						
University	28.8	46.5	27.9	28.8	44.4	28.3
4-year	41.3	39.3	41.3	41.3	41.7	41.2
2-year	30.0	14.2	30.7	30.0	13.9	30.5
Sex of student body:						
Male	5.0	7.4	4.9	5.0	9.0	4.9
Female	4.8	1.5	5.0	4.8	1.7	4.9
Coeducational	90.1	91.1	90.1	90.1	89.3	90.2
Geographic Region [1]:						
Northeast	29.1	26.3	29.3	29.1	29.0	29.2
Midwest	31.1	29.6	31.1	31.1	27.6	31.2
Southeast	15.8	19.6	15.6	15.8	19.3	15.7
West-Southwest	24.0	24.5	23.9	24.0	24.1	23.9
Size of institution [2]:						
Below 200	0.4	0.4	0.4	0.4	0.2	0.4
200- 499	2.4	0.7	2.4	2.4	0.6	2.4
500- 999	9.8	6.5	9.9	9.8	5.5	9.9
1,000- 2,499	17.4	19.7	17.3	17.4	19.8	17.3
2,500- 4,999	22.3	15.5	22.6	22.3	16.8	22.4
5,000- 9,999	19.2	17.0	19.3	19.2	17.8	19.2
10,000-19,999	17.8	21.2	17.6	17.8	21.3	17.7
20,000 or more	10.8	19.0	10.4	10.8	18.0	10.6
Selectivity [3]:						
Under 89	10.8	8.8	10.9	10.8	10.3	10.8
89- 96	9.4	6.0	9.6	9.4	4.1	9.6
97-104	20.0	16.8	20.2	20.0	14.1	20.2
105-112	21.6	22.9	21.5	21.6	21.3	21.6
113-120	9.0	14.8	8.8	9.0	11.9	8.9
121-128	8.0	13.9	7.7	8.0	18.4	7.6
Over 128	4.2	9.7	3.9	4.2	11.3	4.0
Unknown	17.0	7.0	17.5	17.0	8.6	17.2

[1] See Table I-3 for list of States included in each geographic region.
[2] Total full-time enrollment.
[3] The Median scores of entering freshmen on the ACT, the NMSQT, and the SAT composite.
Note: Percents may not add to 100.0 due to rounding.

APPENDIX B

Selected Tables — Phase II

Table II-1. Number of 1966, 1968, 1970, and 1972 freshmen and of health aspirants and percent health aspirants

Item	1966	1968	1970	1972
Number of freshmen	1,436,293	1,316,038	1,539,444	1,641,272
Number of health aspirants	190,304	166,848	187,690	300,172
Percent health aspirants	13.2	12.7	12.2	183.

Table II-2. Number of health aspirants among 1966 and 1972 freshmen, by health field, sex, and race

Health field	1966 freshmen					1972 freshmen				
		Sex		Race			Sex		Race	
	Total	Male	Female	Blacks	Non-Blacks	Total	Male	Female	Blacks	Non-Blacks
All fields[1]	190,269	98,989	91,280	9,476	180,788	300,123	130,841	169,282	22,509	277,610
Biology	27,555	16,261	11,294	2,089	25,465	24,917	15,275	9,642	1,512	23,405
Biochemistry	6,721	4,098	2,623	318	6,402	6,501	4,435	2,066	316	6,185
Biophysics	687	574	113	22	665	606	469	136	70	535
Botany	1,162	723	438	39	1,122	2,146	1,384	762	23	2,123
Zoology	8,194	5,970	2,225	220	7,974	6,924	4,102	2,822	127	6,796
Other biological sciences	5,879	4,133	1,746	164	5,715	16,995	12,297	4,698	439	16,555
Health technology	18,149	3,654	14,494	879	17,269	43,046	12,213	30,833	3,066	39,980
Nursing	36,027	681	35,345	2,290	33,737	67,171	2,291	64,880	9,024	58,147
Pharmacy	9,145	6,948	2,198	439	8,706	12,994	9,334	3,661	840	12,154
Predentistry	14,436	13,144	1,292	305	14,131	12,349	10,515	1,831	593	11,756
Premedicine	42,387	34,645	7,739	1,913	40,473	58,374	43,208	15,165	4,012	54,362
Preveterinary medicine	8,868	6,719	2,149	123	8,745	18,738	11,130	7,607	238	18,498
Therapy	11,058	1,435	9,623	675	10,383	29,364	4,184	25,180	2,249	27,115

[1] Totals may vary from totals in other tables due to the weighting procedures.

Table II-3. Percent distribution of 1966, 1968, 1970, and 1972 freshman health aspirants and nonhealth aspirants, by characteristics of institution in which enrolled

Characteristic of institution	1966		1968		1970		1972	
	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant
Number of freshmen	190,304	123,944	166,848	114,001	187,690	135,224	300,172	134,557
Percent:								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Type of institution:								
University	38.6	29.8	33.8	25.5	33.7	23.7	29.1	21.1
4-year college	36.5	42.1	39.0	43.3	36.8	39.8	36.7	37.9
2-year college	24.8	28.1	27.2	31.2	29.5	36.4	34.2	41.0
Control of institution								
Public	69.5	70.5	69.5	70.5	69.3	74.1	72.6	75.8
Private	30.5	29.5	30.5	29.5	30.7	25.9	27.4	24.2

Note: Percents may not add to 100.0 due to rounding.

Table II-4. Percent distribution of 1966, 1968, 1970, and 1972 freshman health aspirants and nonhealth aspirants, by demographic characteristics, academic background, and finances of students

Student characteristic	1966		1968		1970		1972	
	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant
Number of freshmen	190,304	123,944	166,848	114,001	187,690	135,224	300,172	134,557
Percent male	52.0	58.7	48.3	57.9	46.0	59.0	43.6	58.5
Percent:								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age:								
16 or younger	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1
17	5.3	4.5	5.2	4.8	4.3	3.7	4.9	3.6
18	75.7	73.4	76.3	75.0	75.0	72.8	76.8	73.9
19	12.0	14.3	11.8	13.8	12.7	15.1	13.2	16.0
20	2.0	2.4	1.6	2.1	1.6	2.0	1.3	2.4
21	4.7	5.2	4.9	4.1	6.2	6.4	3.6	4.1
Race:								
Black	5.0	4.9	6.3	6.0	8.2	9.9	7.5	8.6
Nonblack	95.0	95.1	93.7	94.0	91.8	90.1	92.5	91.4
Parent's annual income:								
Less than $4,000	5.9	7.2	6.0	6.7	5.5	5.7	6.6	8.4
$4,000-$5,999	12.0	13.1	9.7	10.4	6.2	7.7	5.7	6.4
$6,000-$7,999	16.3	17.1	14.1	15.8	9.6	10.4	7.8	8.3
$8,000-$9,999	16.8	16.9	16.4	16.7	12.1	13.6	10.2	10.5
$10,000-$14,999	25.8	25.4	27.3	27.0	32.3	31.4	30.4	30.2
$15,000-$19,999	10.1	9.2	11.9	10.8	13.9	13.4	15.5	15.0
$20,000-$24,999	5.1	4.5	5.8	5.2	7.6	7.3	9.2	8.4
$25,000-$29,999	2.6	2.1	3.0	2.6	3.7	3.8	4.5	4.2
$30,000 or more	5.4	4.5	5.9	4.9	9.1	6.7	10.1	8.5
Father's education:								
Grammar school or less	8.0	10.1	9.6	10.3	9.0	10.5	7.8	9.6
Some high school	14.6	16.5	15.4	16.9	14.6	16.8	13.8	15.7
High school graduate	27.1	29.4	27.5	30.4	27.1	29.5	29.3	30.5
Some college	20.2	19.3	18.5	18.1	17.7	17.6	17.1	16.2
College degree	17.8	16.1	17.2	16.1	18.3	17.1	19.2	18.4
Postgraduate degree	12.3	8.5	11.9	8.2	13.4	8.6	12.8	9.7
Mother's education:								
Grammar school or less	5.4	6.4	6.3	7.3	6.0	7.0	5.2	6.4
Some high school	12.0	13.9	13.7	15.1	12.2	14.1	11.8	13.8
High school graduate	41.1	42.8	40.7	43.3	40.7	43.3	43.1	44.0
Some college	22.2	20.3	20.8	18.6	20.0	18.6	18.6	17.0
College degree	16.1	14.5	15.2	13.3	17.3	14.2	16.8	14.9
Postgraduate degree	3.1	2.2	3.3	2.4	3.7	2.8	4.6	3.8
Average grade in high school:								
A or A+	6.9	4.9	6.2	4.4	7.5	4.8	8.9	6.1
A−	10.9	8.4	10.6	8.5	11.7	8.3	13.2	9.9
B+	19.2	15.5	18.9	15.5	20.1	16.9	21.9	17.9
B	23.4	22.6	25.1	22.8	25.5	23.8	26.4	25.5
B−	14.4	15.8	15.0	15.8	14.9	16.6	13.0	14.6
C+	14.2	16.6	13.8	17.2	12.6	16.7	10.9	15.6
C	10.6	15.4	10.0	14.9	7.4	12.0	5.6	9.9
D	0.5	0.9	0.4	0.9	0.4	0.8	0.3	0.6
Concern about financing education:								
None	34.8	36.4	34.2	35.3	31.5	35.1	32.4	36.3
Some concern	57.4	55.2	57.6	56.1	58.0	54.2	51.7	48.9
Major concern	7.7	8.4	8.2	8.6	10.5	10.6	15.9	14.8
Major sources of financing freshman year:								
Parental or family aid	60.9	56.2	64.6	60.6	64.3	58.9	63.9	59.2
Repayable loan	2.7	2.9	17.8	19.1	7.2[1]	6.4[1]	7.9	8.1
Scholarship/grant/or other gift	14.6	13.5	24.9	24.3	24.2	23.2	27.9	25.5

[1] Does not include educational loans.
Note: Percents may not add to 100.0 due to rounding.

Table II-5. Percent distribution of 1966, 1968, 1970, and 1972 freshman health aspirtants and nonhealth aspirants, by student aspirations and career choices

Item	1966		1968		1970		1972	
	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant
Number of freshmen	190,304	123,944	166,848	114,001	187,690	135,224	300,172	134,557
Percent:								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Highest degree planned:								
None	4.2	6.1	3.1	4.9	1.1	2.0	1.7	3.5
Associate (or equivalent)	5.7	6.0	7.1	6.7	6.6	8.0	6.3	8.5
Bachelor's degree (B.A., B.S.)	30.7	39.6	29.5	39.5	30.7	39.2	29.7	39.2
Master's degree (M.A., M.S.)	16.5	33.3	19.2	33.8	19.9	32.5	18.1	29.3
Ph.D. or Ed.D.	7.8	10.1	9.1	10.8	8.7	10.0	8.8	9.3
M.D., D.D.S., or D.O.	31.9	0.8	28.9	0.7	29.0	1.3	32.3	1.4
LL.B. or J.D.	0	1.8	0.1	1.6	0.2	4.2	0.1	5.6
B.D.	0.1	0.5	0.1	0.3	0	0.4	0.1	0.7
Other	3.1	1.8	2.9	1.8	3.7	2.6	2.8	2.6
Career choices:								
Accountant or actuary	0	3.3	0	3.3	0.1	3.8	0	4.3
Actor or entertainer	0.1	1.0	0	0.8	0	1.1	0.1	1.0
Architect	0	2.2	0	1.6	0	1.5	0	2.0
Artist	0.1	2.3	0.1	2.1	0.1	2.2	0.1	2.2
Business (clerical)	0.2	2.7	0.3	2.9	0.4	3.0	0.2	3.4
Business executive (manager, administrator)	0.4	7.8	0.2	7.6	0.3	7.9	0.2	6.0
Business owner or proprietor	0.2	1.8	0.2	1.3	0.1	1.7	0.1	1.4
Business salesman or buyer	0.1	0.9	0	1.1	0.1	1.1	0.1	0.9
Clergy (rabbi, minister, priest)	0.1	0.7	0.1	0.6	0	0.6	0	0.5
Clergy (other religion)	0.1	0.3	0	0.2	0.1	0.2	0	0.2
Clinical psychologist	0.2	1.4	0.1	1.2	0.3	1.2	0.1	1.6
College teacher	0.5	2.1	0.4	1.2	0.3	1.3	0.2	0.7
Computer programmer	0.1	1.6	0.1	2.5	0.1	2.5	0	2.0

Item	1966		1968		1970		1972	
	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant
Career choices (con't):								
Conservationist or forester	1.5	1.0	1.4	0.7	1.9	1.2	1.6	1.8
Dentist (including orthodontist)	8.9	0.2	7.3	0.1	5.9	0.3	5.5	0.2
Dietitian or home economist	0.1	1.0	0.1	0.5	0.1	0.6	0.1	0.8
Engineer	0.2	11.2	0.2	9.9	0.2	8.4	0.1	6.6
Farmer or rancher	0.2	1.1	0.2	0.9	0.2	0.9	0.2	1.6
Foreign service worker (including diplomat)	0.1	2.1	0	1.1	0	0.7	0	0.7
Homemaker (full-time)	2.3	3.5	0.4	0.8	0.4	0.7	0.2	0.6
Interior decorator (including designer)	0.1	0.8	0	0.9	0	0.5	0	0.7
Interpreter (translator)	0	0.7	0	0.6	0	0.5	0	0.4
Lab technician or hygienist	.6	0.4	6.8	0.3	5.9	0.3	8.4	0.4
Law enforcement officer	0.1	0.8	0.1	0.7	0.1	0.6	0.1	1.7
Lawyer (attorney)	0.2	4.5	0.1	4.0	0.1	4.4	0.1	6.1
Military service (career)	0.3	1.5	0.3	1.2	0.4	1.3	0.6	1.6
Musician (performer, composer)	0.1	0.9	0.1	1.1	0.1	1.5	0.1	1.6
Nurse	18.2	0.1	21.3	0.2	23.7	0.7	21.6	0.4
Optometrist	0.4	0.1	0.4	0.1	0.3	0.1	0.6	0.2
Pharmacist	4.6	0.1	3.6	0.1	4.3	0.2	4.3	0.1
Physician	23.2	0.4	19.4	0.4	19.5	0.6	20.0	0.5
School counselor	0.1	0.7	0.1	0.4	0.1	0.4	0.1	0.4
School principal/superintendent	0	0.1	0	0.1	0	0	0	0.1
Scientific researcher	8.6	2.8	9.1	2.1	8.2	1.8	5.9	1.7
Social worker	0.1	3.2	0.1	3.1	0.3	3.5	0.2	3.3
Statistician	0	0.2	0	0.1	0	0.1	0	0.1
Therapist (physical, occupational, speech)	5.4	0.4	6.5	0.3	6.6	0.4	8.7	0.4
Teacher (elementary)	0.7	8.3	0.9	9.7	0.8	8.6	0.5	7.1

Table II-5 (Continued)

Item	1966		1968		1970		1972	
	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant
Career choices (con't):								
Teacher (secondary)	3.9	13.9	3.8	14.8	2.7	11.8	0.9	7.6
Veterinarian	5.3	0.2	5.4	0.1	5.0	0.3	6.5	0.3
Writer or journalist	0.1	2.1	0.1	1.9	0.1	2.1	0	2.0
Skilled trades	0.1	0.8	0.3	1.0	0.4	1.0	0.3	2.4
Other	3.1	4.2	4.2	5.1	4.6	5.6	5.8	7.2
Undecided	2.3	4.4	6.4	11.2	6.2	12.6	6.5	15.4

Note: Percents may not add to 100.0 due to rounding.

Table II-6. Percent distribution of 1966, 1968, 1970, and 1972 freshman health aspirants and nonhealth aspirants, by student attitudes

Student attitude	1966		1968		1970		1972	
	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant	Health aspirant	Nonhealth aspirant
Number of freshmen	190,304	123,944	166,848	114,001	187,690	135,224	300,172	134,557
Percent:								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
College officials have the right to regulate student behavior off campus:								
Disagree strongly	[1]	[1]	48.3	49.1	54.7	55.1	64.5	64.5
Disagree somewhat	[1]	[1]	28.5	27.4	29.2	28.0	23.2	22.1
Agree somwhat	[1]	[1]	18.1	18.4	13.5	13.9	9.6	10.4
Agree strongly	[1]	[1]	5.0	5.2	2.8	3.0	2.6	3.0
The chief benefit of a college education is that it increases one's earning power:								
Disagree strongly	[1]	[1]	18.2	15.9	12.7	11.6	14.4	12.5
Disagree somewhat	[1]	[1]	27.9	25.2	24.4	20.9	29.8	26.2
Agree somewhat	[1]	[1]	39.0	40.3	44.4	45.0	42.0	44.9
Agree strongly	[1]	[1]	14.9	18.6	18.5	22.4	13.8	16.4
Most college officials have been too lax in dealing with students protests on campus:								
Disagree strongly	[1]	[1]	9.3	10.1	9.7	11.2	10.7	11.8
Disagree somewhat	[1]	[1]	35.3	35.8	30.3	30.3	47.0	45.4
Agree somewhat	[1]	[1]	38.2	37.8	37.1	36.9	32.7	32.1
Agree strongly	[1]	[1]	17.1	16.3	22.8	21.6	9.6	10.7
Realistically, an individual person can do little to bring changes in our society:								
Disagree strongly	[1]	[1]	32.6	31.1	24.3	22.5	28.1	27.3
Disagree somewhat	[1]	[1]	36.8	36.1	38.0	38.8	30.3	30.1
Agree somewhat	[1]	[1]	23.4	24.5	29.9	30.6	30.4	30.6
Agree strongly	[1]	[1]	7.2	8.3	7.8	8.1	11.2	12.0
Marijuana should be legalized:								
Disagree strongly	[1]	[1]	66.4	63.7	42.7	39.4	35.8	34.4
Disagree somewhat	[1]	[1]	15.4	16.3	22.1	22.5	19.3	18.9
Agree somewhat	[1]	[1]	12.4	13.4	24.0	24.8	27.2	26.6
Agree strongly	[1]	[1]	5.8	6.6	11.2	13.3	17.8	20.2
Becoming accomplished in one of the performing arts (acting, dancing, etc.):								
Not important	58.2	56.3	71.0	67.5	58.7	55.1	65.8	62.2
Somewhat important	33.6	32.7	23.3	22.9	32.2	31.6	26.6	24.8
Very important	6.4	7.2	4.3	5.7	6.7	8.5	5.6	8.0
Essential	1.9	3.9	1.4	3.8	2.4	4.8	2.0	5.0
Helping others who are in difficulty:								
Not important	1.4	2.4	3.0	4.4	1.5	2.3	1.7	2.7
Somewhat important	24.9	31.8	29.5	38.3	26.8	34.7	25.3	32.0
Very important	46.0	45.4	41.0	40.2	48.4	46.1	45.6	44.8
Essential	27.7	20.4	26.4	17.1	23.2	17.0	27.5	20.5
Participating in an organization like the Peace Corps or Vista:								
Not important	33.4	39.2	38.0	43.8	31.1	35.7	34.7	41.1
Somewhat important	44.2	42.0	41.2	38.6	47.4	45.5	46.6	43.8
Very important	17.1	14.7	15.9	13.3	17.3	15.1	15.1	11.8
Essential	5.3	4.1	4.9	4.3	4.2	3.7	3.6	3.3
Becoming a community leader:								
Not important	27.7	27.5	37.2	35.2	41.1	38.6	44.8	42.0
Somewhat important	47.9	46.2	44.6	43.8	45.8	46.1	42.6	42.7
Very important	20.6	21.6	15.2	16.9	11.2	12.9	10.6	12.2
Essential	3.8	4.7	3.0	4.2	2.0	2.4	2.0	3.1
Making a theoretical contribution to science:								
Not important	33.8	62.9	38.2	69.7	39.6	65.1	39.6	67.5
Somewhat important	37.6	25.6	36.2	21.8	37.9	26.4	37.4	24.6
Very important	21.5	8.8	19.3	6.5	17.8	6.9	18.1	6.0
Essential	7.0	2.7	6.2	2.1	4.6	1.6	4.9	2.0

[1] Item not asked this year.
Note: Percents may not add to 100.0 due to rounding.

APPENDIX C

Selected Tables — Phase III

Table III-1. Number of 1966 freshmen, by sex and 1970 career choice

Sex	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Both sexes	89,547	7,091	4,440	9,604	28,430	589	4,158	18,741	13,784	2,710
Male	35,375	6,917	107	2,148	1,788	589	3,154	16,702	1,742	2,228
Female	54,172	175	4,333	7,455	26,642	0	1,004	2,039	12,042	482
Percent male	39.5	97.5	2.4	22.4	6.3	100.0	75.8	89.1	12.6	82.2

Table III-2. Percent distribution of 1966 freshmen, by racial/ethnic background and 1970 career choice

Racial/ethnic background	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
White	88.8	90.9	89.3	90.5	85.1	100.0	94.2	93.7	83.6	97.2
Black	5.9	0	8.9	3.1	8.5	0	3.5	1.7	12.2	1.5
American Indian	0.1	0	0	0	0.2	0	0.4	0	0.3	0
Oriental	1.7	5.0	1.3	3.9	0	0	0	3.2	0.8	0
Other	2.8	3.1	0.5	0.8	5.1	0	1.9	1.1	3.1	1.3
No response	0.6	0.9	0	1.7	1.0	0	0	0.2	0	0

Note: Percents may not add to 100.0 due to rounding.

Table III-3. Comparison of 1966 and 1970 career choices of 1966 freshmen

1966 career choice	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
All choices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Accountant or actuary	0.3	0	0	0.6	0.3	0	1.5	0.1	0.6	0
Actor or entertainer	0.4	0	0	0	0.9	0	0	0	1.0	0
Architect	0.2	0	0.5	0	0	0	0	0.9	0	0
Artist	0.2	0	0	0	0.5	0	0	0	0.4	0
Business (clerical)	0.8	0	2.6	0	1.8	0	0	0	1.0	0
Business executive (management, administrator)	1.0	0	0.1	0	0	0	0.2	0.6	0.1	0
Business owner or proprietor	0.2	0	0	0	0	0	0	0.9	0	1.4
Business salesman or buyer	0.1	0	1.3	0	0	0	0	0	0	0
Clergyman (minister, priest)	0.2	0	0	0	0	7.2	0	0.9	0	0
Clergy (other religious)	0.1	0	0	0	0	0	0	0.1	0.5	0
Clinical psychologist	0.4	0	0	0.5	0.4	0	0	0.1	0.9	1.7
College teacher	0.8	0.6	1.8	0	0.9	0	0	0.7	1.2	0
Computer programmer	0.1	0	1.1	0.7	0	0	0	0	0	0
Conservationist or forester	0.6	0	0	3.0	0.3	2.9	0.3	0	0	0
Dentist (including orthodontist)	5.7	47.4	0	7.2	0.4	8.0	3.0	3.8	0.5	0
Dietitian or home economist	2.3	0	54.3	0	0.4	0	0	0	0	0
Engineer	1.8	2.6	0	3.5	0	0	2.0	4.8	0.1	1.7
Farmer or rancher	0.9	0	0	0	2.0	0	0	0	0.4	6.8
Foreign service worker (including diplomat)	0.5	0	0	0.1	0.1	0	0	1.3	1.1	0
Housewife	3.2	0.9	3.2	7.7	3.2	0	2.2	0.2	6.4	0
Interior decorator (including designer)	0.9	0	2.8	0	0.2	0	0	0	4.2	0
Interpreter (translator)	0.1	0	0	0	0.2	0	0	0	0.2	0
Lab technician or hygienist	4.8	0.9	4.3	32.7	0.8	0	0	1.4	2.8	2.7
Law enforcement officer	0	0	0	0	0	0	0	0	0	0
Lawyer (attorney)	0.5	1.9	0	0	0.1	0	0	1.5	0	0.2
Military service (career)	0.1	0.3	0	0	0	0	2.0	0	0	0
Musician (performer, composer)	0.2	0	0	0	0.5	0	0	0	0.4	0
Nurse	23.6	0	6.7	6.8	70.0	0	0	0.2	1.0	3.7
Optometrist	0.1	0	0	0	0	11.6	0	0	0	0
Pharmacist	2.9	4.5	0	1.7	0	0	50.1	0	0.2	0
Physician	18.3	23.9	0	3.5	3.9	26.1	19.8	63.1	2.1	5.2
School counselor	0.2	0.1	0	1.1	0.1	0	0	0	0.3	0
School principal/superintendent	0	0	0	0	0	0	0	0	0	0
Scientific researcher	3.0	2.7	0	7.1	0	0	5.9	7.0	1.4	0.8
Social worker	1.4	0	1.5	0.4	2.5	0	0	0	3.1	0
Statistician	0.1	0	0	0	0	0	0	0	1.0	0
Therapist (physical, occupational, speech)	7.2	0	0.9	0.6	1.3	0	0	1.1	43.4	0
Teacher (elementary)	1.7	0	0.5	3.5	1.2	0	0	0	4.6	5.4
Teacher (secondary)	4.9	6.3	10.9	7.5	1.1	31.8	1.1	2.0	12.3	6.1
Veterinarian	2.8	1.6	0	3.6	0.6	5.6	0	0.2	1.8	58.8
Writer or journalist	0.6	0	0	0	0.5	0	1.5	0.5	1.0	2.8
Skilled trades	0.2	0	0	0	0	8.7	0	0.5	0	0
Other	2.4	1.2	0	6.1	2.1	0	1.9	2.1	2.4	1.4
Undecided	2.6	4.6	5.8	1.6	1.8	0	1.8	3.9	1.7	1.3
No response	1.0	0	0	0.6	2.0	1.0	0	0.5	1.2	0

Note: Percents may not add to 100.0 due to rounding.

Table III-4. Percent distribution of 1966 freshmen, by 1971 major source of income and 1970 career choice

Major source of income 1971[1]	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Number of students[2]	24,561	3,144	466	2,208	2,349	251	865	11,271	3,356	700
Percent										
All sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fellowships, scholarships, traineeships, etc.										
NSF	0	0	0	0	0	0	0	0	0	0
NIH, NIMH, PHS	2.0	0	0	0	12.1	0	0	1.8	0	0
NDEA	1.0	1.6	0	0	0	2.4	0	1.1	1.8	0
Other HEW	3.2	0	0	0	3.3	27.1	0	1.0	14.1	8.0
Other federal government	5.1	1.1	16.6	0	1.7	0	0	2.6	24.2	0
State or local government	2.6	3.3	4.7	1.0	0.9	0	0	3.6	0	11.1
School or university	7.5	2.7	0	12.0	0.9	0	46.0	9.1	1.5	0
Private foundations, organizations	2.6	1.1	0	1.3	12.5	0	0	2.3	0.5	0
Industry or business	0.6	0	0	0	0	0	0	0	4.1	0
Other fellowships, scholarships	1.4	0	0	1.4	11.5	0	0	0.3	0	0
Employment:										
Faculty appointment	0	0	0	0	0	0	0	0	0	0
Teaching assistantship	1.2	0	15.5	2.0	0	0	0	0.6	3.3	0
Research assistantship	0.3	0.4	0	0	0	0	0	0.6	0	0
Other part-time employment during the academic year	1.7	1.5	0	3.8	2.0	0	6.1	0.8	3.1	0
Other employment	5.1	1.8	0	17.9	14.6	17.5	0	1.7	5.4	6.6
Other source:										
Withdrawals from savings, assets	9.7	15.4	0	0	0	0	0	12.2	11.3	22.8
Spouse's earnings or funds	8.4	10.4	7.2	1.7	5.7	0	26.9	8.6	6.5	13.7
Support from parents or relatives	33.5	46.7	29.1	15.3	14.6	33.9	17.1	43.8	17.1	29.4
G.I. benefits	0.1	0	0	0	0	0	0	0	1.0	0
Federal government loans	2.7	12.1	0	0	0	0	0	1.8	2.5	0
State or local government loans	1.4	0.6	0	0	0	18.7	0	2.4	0	0
Commercial loans (banks, etc.)	6.3	0	0	28.6	12.0	0	3.8	4.3	1.8	6.8
Other loans	0.9	0.6	0	0	5.2	0	0	0.7	0	0
Partial aid from employer (tuition reimbursement or waiver, grants, etc.)	1.6	0	0	15.1	3.0	0	0	0	0	0
Other	1.0	0	26.7	0	0	0	0	0.6	1.7	1.4

[1] To meet individual tuition and living expenses.
[2] Number of students in advanced study who responded to this question.
Note: Percents may not add to 100.0 due to rounding.

Table III-5. Percent of 1966 freshmen, by 1970 career choice with various life goals

Life goal	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	5.5	1.2	2.5	3.3	5.1	0	7.1	4.3	13.3	1.1
Becoming an authority on a special subject in my subject field	58.1	54.2	60.7	58.9	52.0	75.2	65.0	65.1	58.2	64.8
Obtaining recognition from my colleagues for contributions in my special field	35.2	38.6	26.0	41.3	29.8	18.2	39.9	37.8	41.1	37.5
Becoming an accomplished musician (performer or composer)	2.5	0	0	2.1	2.5	0	2.9	2.9	3.9	2.8
Becoming an expert in finance and commerce	4.5	5.5	2.7	4.2	3.1	1.1	20.6	4.7	1.8	6.6
Having administrative responsibility for the work of others	23.1	17.6	32.0	18.3	32.6	42.1	37.6	12.5	18.4	9.0
Being very well off financially	28.6	44.7	31.9	29.9	24.5	32.0	49.9	20.9	29.6	34.3
Helping others who are in difficulty	81.0	74.1	72.7	74.0	83.5	87.3	58.7	89.3	90.8	82.7
Participating in an organization like the Peace Corps or Vista	15.0	9.8	12.2	17.4	15.2	31.4	1.9	16.4	18.3	12.6
Becoming an outstanding athlete	4.3	0.5	1.5	7.0	4.1	18.8	7.3	5.5	4.1	3.8
Becoming a community leader	19.0	23.6	16.5	8.3	12.4	48.7	32.3	27.7	21.3	20.4
Making a theoretical contribution to science	16.6	14.7	12.4	27.6	7.6	29.5	15.6	28.5	11.6	24.6
Writing original works (poems, novels, short stories, etc.)	7.4	1.7	1.8	12.2	6.5	0	2.7	9.0	11.9	1.5
Never being obligated to people	24.5	26.4	18.0	30.2	21.8	38.2	29.2	23.4	24.6	36.8

Table III-6. Percent of 1966 freshmen, by 1970 career choice with various status in 1971

1971 status[1]	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Working parttime	15.2	23.9	2.5	11.4	16.1	45.3	28.6	17.4	8.5	8.0
Working fulltime	49.0	14.2	65.5	75.1	65.7	5.6	51.0	13.0	64.9	19.4
In military service, active duty	5.4	10.4	1.4	0.4	6.7	14.8	4.8	5.3	2.4	17.1
Unemployed, looking for a job	2.4	0.9	10.5	5.3	0.9	0	8.2	1.2	1.9	0
Unemployed, not looking for a job	4.8	5.1	3.2	0.1	5.6	10.8	2.2	5.0	4.8	17.8
Housewife	19.3	0	24.6	28.0	35.6	0	8.5	1.3	19.1	5.4
Undergraduate student, fulltime	8.5	6.7	8.9	4.7	5.8	18.9	27.4	6.8	12.6	14.9
Undergraduate student, parttime	5.0	5.5	0	7.9	7.5	0	4.8	0.8	5.2	3.1
Graduate student, fulltime (including law, thesis work, etc.)	5.8	6.5	5.4	1.0	2.6	15.7	0	9.4	11.7	8.3
Graduate student, parttime (including law, thesis work, etc.)	3.2	1.5	9.6	2.3	1.2	0	0	2.7	9.2	0.4
Medical student (including dentistry and veterinary)	21.8	64.0	0	1.9	3.0	56.7	2.9	67.1	0	34.4

[1] A student may fall in more than one status.

Table III-7. Percent of 1966 freshmen, by 1970 career choice who discussed career and education plans with various persons

Person with whom discussed	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Friend(s)	83.4	88.3	75.2	79.5	83.9	77.9	76.9	85.6	84.4	83.1
Spouse	38.2	42.9	32.4	37.3	45.0	45.5	47.8	30.1	32.6	37.5
Parents	79.3	91.2	78.5	79.0	70.3	71.8	85.1	85.3	82.2	82.5
Siblings	33.3	29.7	27.1	21.5	34.2	20.3	11.3	44.1	39.1	17.8
Faculty advisor	34.0	34.0	38.3	31.1	17.4	16.7	14.6	53.9	49.1	31.6
Professor or instructor	43.8	38.2	46.4	39.4	35.2	51.4	22.7	57.2	53.7	47.0
College placement personnel	5.2	5.4	5.9	6.1	3.8	1.0	3.8	7.3	5.3	4.0
College counselor	11.5	16.3	4.9	16.7	4.3	1.0	9.0	18.5	12.3	21.5

Table III-8. Percent of 1966 freshmen, by 1970 career choice not in school of first choice, by reason

Reason	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Number of students[1]	24,981	3,072	586	558	1,863	334	233	12,996	4,516	823
Proportion not in school of first choice	16.4	11.2	0	8.6	2.7	16.8	0	23.5	5.8	33.1
Number not in school of first choice[2]	4,088	345	0	48	50	56	0	3,056	261	272
Percent:										
Not accepted	91.2	100.0	0	0	66.0	100.0	0	98.0	52.9	46.3
No financial assistance offered	2.2	0	0	0	0	0	0	1.8	21.1	0
Unacceptable amount of financial assistance offered	2.2	0	0	0	0	0	0	1.2	21.1	0
Better terms of financial assistance at school I chose	2.2	0	0	0	0	0	0	3.6	5.4	0
Other reasons (not financial)	8.7	0	0	100.0	56.0	0	0	9.2	10.7	0

[1] Number of students responding to this question.
[2] Number of students not in school of first choice who responded to this question.
Note: Percents may not add to 100.0 due to rounding.

Table III-9. Percent of 1966 freshmen, by 1970 career choice with various important factors in choice of long-run career occupation

Factor in choice	Total	Dentist	Dietitian	Laboratory technician	Nurse	Optometrist	Pharmacist	Physician	Therapist	Veterinarian
Job openings are generally available	53.0	43.9	46.2	63.3	65.2	19.2	48.5	39.6	47.9	56.1
Rapid career advancement is possible	18.5	9.4	33.4	21.5	23.2	10.8	22.1	12.5	14.5	18.3
High anticipated earnings	41.3	66.4	46.1	49.0	37.5	43.0	62.3	34.8	30.6	49.0
It's a well respected or prestigious occupation	48.7	58.6	27.2	52.3	50.0	34.4	66.1	53.1	35.4	45.3
Provides a great deal of autonomy	35.9	52.2	26.2	20.7	28.2	45.0	27.7	58.9	27.5	37.8
Chance for steady progress	32.2	20.2	56.0	38.4	38.2	0	42.7	16.8	31.2	43.6
Chance for originality	38.2	35.8	50.8	15.2	36.9	23.9	21.2	37.5	60.7	38.6
Can make an important contribution to society	65.2	60.5	49.7	52.3	70.6	67.8	56.4	71.5	65.2	61.6
Can avoid pressure	11.5	19.3	20.6	10.6	7.9	13.1	9.6	8.7	16.8	13.0
Can work with ideas	45.0	37.7	57.6	30.0	44.8	27.5	46.4	40.5	62.3	44.7
Can be helpful to others	82.9	80.8	82.5	70.1	89.1	85.2	74.2	80.4	85.2	72.9
Have leadership opportunities	38.3	30.0	53.2	26.2	54.6	27.5	34.0	29.4	28.3	29.8
Able to work with people	77.0	74.6	79.8	60.8	85.6	61.0	58.5	73.2	88.3	47.9
Intrinsic interest in the field	61.7	59.4	60.3	63.7	58.3	50.7	50.6	71.9	61.1	50.3
Enjoyed my past experience in this occupation	47.4	12.7	54.6	49.5	63.6	18.8	33.2	32.0	52.2	58.1