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A Survey of High School Seniors' Career Choices: Implications for Allied Health

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ABSTRACT: This paper describes a research study conducted using a survey instrument to determine what factors influence high school seniors when making decisions related to future careers and college education. Students were asked to indicate what careers they intended to pursue, what people and factors influenced their careers choices, and their familiarity with and impressions of the allied health professions. The majority indicated that personal satisfaction, employment opportunities, and income were the most important factors influencing their career choices. Although 76.5% of the respondents had a favorable impression of allied health, only 15% indicated that they were very familiar with the allied health professions. The results here and in other studies point to lack of knowledge rather than lack of interest as the leading cause of enrollment vacancies in allied health curricula.

Increasing demand for allied health personnel in the face of declining enrollments has contributed to an alarming shortage of qualified personnel in many critical areas.^{1,3} A key to the viability of allied health education is its ability to maintain its share of qualified students from the traditional college-age applicant pool, while tapping into less traditional pools of students.^{1,2} It is estimated that the number of people between the ages of 18 and 25 has fallen 10% since 1980, and by 1996, the traditional college candidate pool will fall another 25%.⁴ In addition to these shifts in demographics, changes in social roles and norms have given females access to other professions, which further compounds the problem of attracting qualified candidates into the allied health professions.⁵ Not only is the available pool of female applicants and traditional college-age students shrinking, but it is expected that most new jobs in the

economy between 1987 and 2000 will require more education and higher levels of technical expertise.⁶ The greater demands for highly skilled personnel in the general workforce will result in many more industries, including the health professions, recruiting from the same applicant pool.⁶

The American Medical Association's Committee on Allied Health Education and Accreditation (CAHEA) annually surveys program directors in several allied health fields in order to gather comprehensive data on the number of applications, enrollments, and graduates. The 1989 survey of program directors reaffirmed the findings of the 1987 and 1988 surveys which revealed that the majority of programs continue to experience fewer qualified applicants than are needed to fill classes to capacity. In the 1989 survey, CAHEA reported that accredited allied health education programs were filled to approximately 73% of capacity overall.⁷ If all classes were filled to capacity, enrollment in existing programs could increase across the board by as much as 25%. Although the 1990 survey of program directors indicated a new trend toward an increase in the number of applications and enrollment for most disciplines, approximately 11,000 more students could have been enrolled in allied health programs during 1990.⁸ Obviously, there is a need to improve student recruitment and retention efforts. However, certain fields like physical therapy have not experienced an applicant deficit, which can most likely be explained by the profession's rising salaries, growing autonomy, high level of demand, and greater public visibility.¹

METHODOLOGY

The authors surveyed a sample of high school seniors from three schools in the public school system of Richmond County in Augusta, Georgia. The high school students were eligible for acceptance into several associate's degree programs at the Medical College of Georgia (MCG). MCG also offers an early acceptance program for high school seniors interested in pursuing baccalaureate degrees in: associated dental sciences, health information management, medical illustration, medical technology, occupational therapy, physical therapy, physician assistant, radiologic technologies, and respiratory therapy. High school students accepted into the early acceptance program are guaranteed admission to a baccalaureate program two years later, after completing prerequisite coursework. High school students were surveyed because of an interest in developing recruitment strategies aimed at that population.

Surveys were distributed to 505 high school students who were present on the days of data collection and volunteered to participate. Each survey required approximately 10 minutes to answer 37 questions that were organized into 4 sections. In addition to basic demographic information, students were asked to indicate what careers they intended to pursue, what people and factors influenced their career choices, and their familiarity with and impressions of the allied health professions. The final section asked students not interested in an

allied health career to briefly state why they had no interest.

An itemized analysis of the questionnaire data was completed to obtain descriptive data. Statistical analysis of the data was performed using two-tailed chi square analysis with the level of significance set at 0.05.

RESULTS

A total of 393 usable surveys were received which resulted in a 77.8% response rate. Demographic data indicated that 53% of the respondents were White, 39% Black, 3% Hispanic, 2% Asian, and 3% other ethnic origins. Fifty-six percent of the sample was female.

Demographic data were also obtained on the parents' educational levels. Although mothers' and fathers' educational levels varied considerably, from high school dropouts to postgraduate degrees, it was not a factor that significantly affected the students' career choices, familiarity with the allied health professions, or perceived social status of allied health.

Figure 1 shows the students' plans after graduation, and Figure 2 shows the career choices of high school seniors who participated in the survey. The majority of students indicated that they planned to attend college. The gender difference was striking: females chose health careers first, business second, and then engineering, while males chose engineering first, business second, and then health careers. Types of high school diplomas included college preparatory, general, or vocational. School type referred to the school the student planned to attend after high school and included career training institute, tech-

FIGURE 1

Plans of High School Seniors After Graduation (n=393)

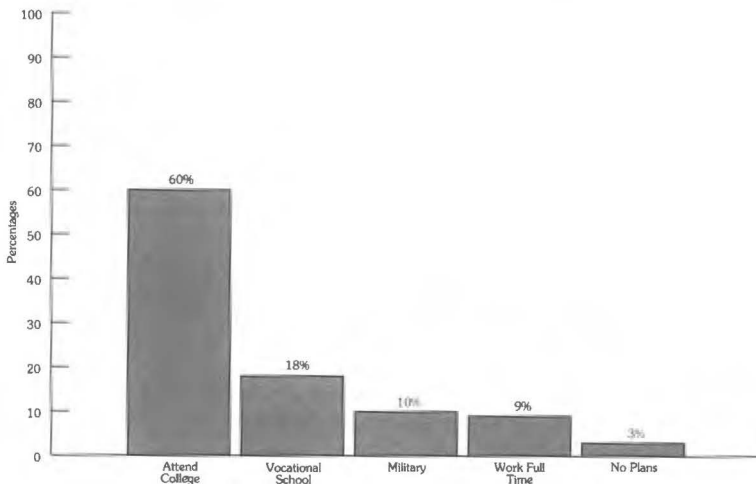
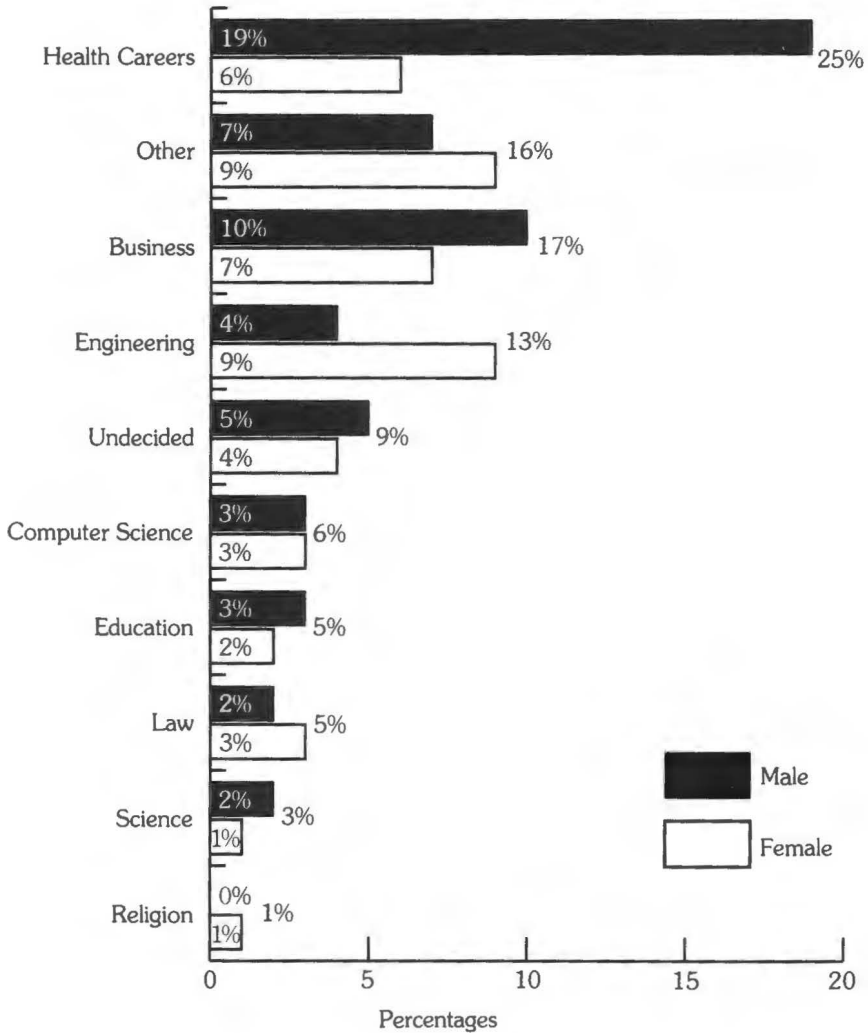


FIGURE 2

Career Choices of High School Seniors (n=393)



nical school, or college. Results indicated that students' career choices after graduation were appropriate for the type of high school diploma they were earning and the type of school that they planned to attend after college.

Seventy-two percent of the students indicated that they chose their career for themselves, with parents and other relatives exhibiting the greatest influence. Only 44% approached their counselors for guidance, and the results indicated that students were least influenced by their counselors when making

career choices. However, female students, students with A averages, and students with higher SAT scores (score of 1000 or greater) were more likely to approach their high school counselors for career guidance. Guidance from other individuals was significantly related ($p < 0.050$ to < 0.001) to the career choices of high school seniors. Table 1 shows, in descending order, the people who most influenced students' career choices.

Factors that influenced career choices are shown in Table 2. The majority of students indicated that personal satisfaction ($p < 0.05$), employment opportunities ($p < 0.05$), and income ($p < 0.001$) were the most important factors influencing their career choices. Other variables that significantly affected career choices included gender ($p < 0.001$), race ($p < 0.001$), type of high school diploma ($p < 0.001$), educational opportunities ($p < 0.01$), income potential ($p < 0.001$), upward mobility ($p < 0.05$), social status of career ($p < 0.05$), familiarity with allied health ($p < 0.001$), and perceived social status of the allied health professions ($p < 0.01$).

In the final section of the survey, respondents were asked to indicate their familiarity with the allied health professions, rank the social status of allied health, and state their impressions of allied health. Also, students who did not select a health career were asked to briefly state why they did not. Results indicated that greater than 65% ($p < 0.01$) had a favorable impression of allied health whether they were interested in a health field or another career. Only 15% of respondents indicated that they were very familiar with the allied health professions, 70% were vaguely familiar, and 15% knew nothing about

TABLE 1

People Most Influencing Career Choices of High School Seniors

	Greatly Influenced	Somewhat Influenced	Did Not Influence
Self	78%	14%	7%
Parents	46%	36%	16%
Health Professionals	28%	27%	44%
Relatives	24%	41%	33%
Other	20%	33%	46%
Teacher	18%	38%	44%
Business Professional	16%	44%	39%
Peers	13%	44%	42%
School Counselor	12%	32%	56%

Not all questions were answered by every student. Percentages are based on the number of people answering the question.

TABLE 2

Factors Influencing Career Choices of High School Seniors

	Greatly Influenced	Somewhat Influenced	Did Not Influence
Personal Satisfaction	71%	23%	6%
Employment Opportunities	58%	31%	10%
Large Income	57%	29%	13%
Job Security	46%	36%	18%
Upward Mobility (Positions)	44%	35%	20%
Educational Opportunities	38%	47%	15%
Amount of Education Required	34%	37%	28%
Public Service	25%	50%	24%
Social Status	27%	43%	30%

Not all questions were answered by every student. Percentages are based on the number of people answering the question.

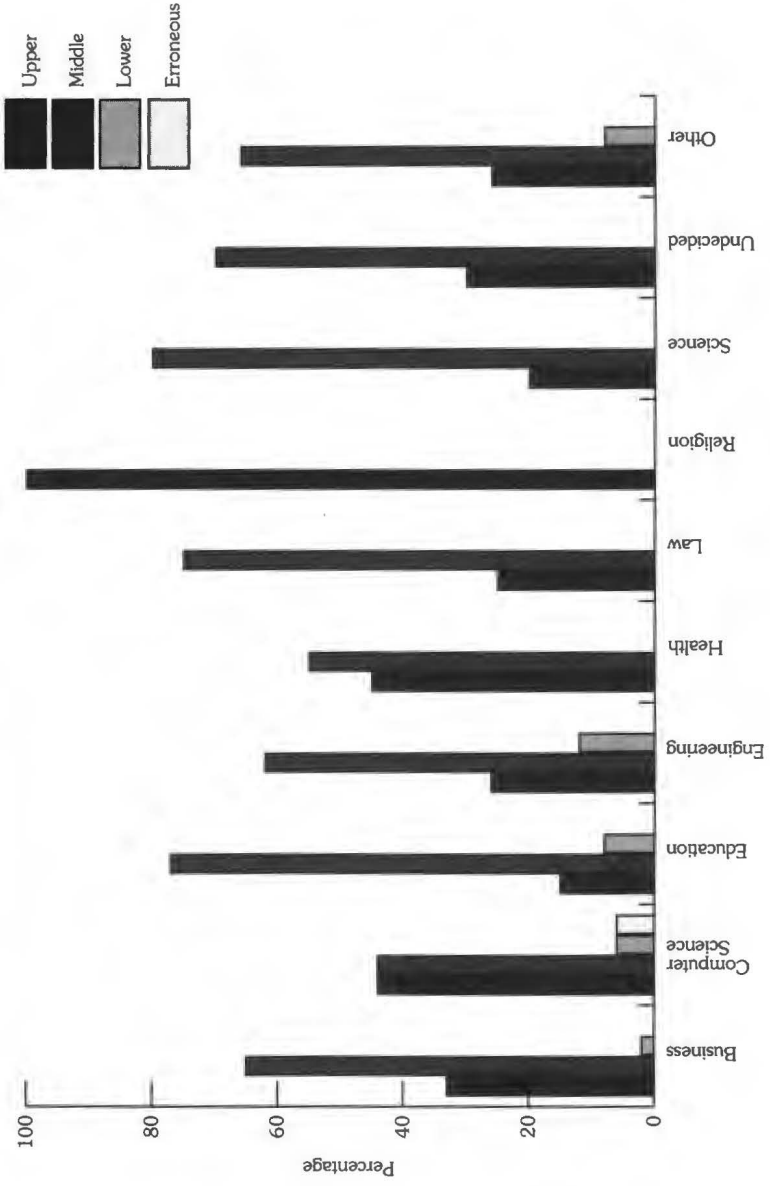
allied health. In fact, several students stated that they had never heard of the allied health professions prior to the survey.

The variables that significantly affected familiarity with the allied health professions included race ($p < 0.01$), academic average ($p < 0.05$), self-reported SAT scores ($p < 0.001$), graduation plans ($p < 0.001$), type of high school diploma ($p < 0.01$), and career choice ($p < 0.001$). Students with grade averages of A were less familiar with allied health than students with B or C averages. Students with D averages were least familiar with allied health. Students who reported higher SAT scores (score of 1000 or greater) were most familiar with allied health. The students who planned to attend college (67%) indicated that they were only vaguely familiar with the allied health professions. Students who were very familiar with the allied health professions indicated that they planned to pursue a health-related career (62%), followed by business (13%), and engineering (9%). Students who indicated that they were not familiar with the allied health professions planned to pursue other careers (29%), business (26%), or engineering (19%).

The variables that significantly related to the students perceived social status of allied health included gender ($p < 0.001$), type of high school diploma ($p < 0.001$), type of school ($p < 0.001$), type of degree sought after graduation ($p < 0.001$) and career choice ($p < 0.01$). Figure 3 shows how students rated the social status of allied health for each career choice. The majority of both females (65%) and males (66%) perceived the allied health professions to be middle class social status, but more females viewed allied health as higher

FIGURE 3

Social Status of Allied Health as Perceived by High School Seniors



social status and more males viewed allied health as lower social status. Seventy-one percent of general diploma high school students, 61% of students in a college preparatory high school program, and 57% of vocational technical students perceived the allied health professions to have a middle class social status. All students who chose a health career viewed the allied health professions as upper (45%) or middle (55%) class. Students who chose engineering or other careers represented the largest percentage who viewed the allied health professions as low social status. Students who planned to attend college perceived the social status of allied health to be higher than those who planned to attend a technical school.

Less than 1% of respondents commented that fear of AIDS or other infectious diseases was a deterrent from selecting an allied health career. Reasons given for not selecting an allied health career included course requirements, lack of awareness, difficulty of curricula, dislike of sciences, dislike of hospitals or sick people, and greater opportunities in nonhealth fields.

DISCUSSION

The results of this study and other studies^{9,12} indicate that lack of knowledge rather than lack of interest is the major reason why more students may not select health careers. Although most students surveyed had a favorable impression of allied health, few indicated that they were very familiar with allied health careers. The results of this study offer further evidence that fear of AIDS is probably not a major factor to explain why students may or may not choose to pursue a health career.^{9,10} Buccelli et al⁹ reported that while fear of exposure to AIDS may negatively impact some students, the majority of students did not express this concern. Kosegi and Feely¹⁰⁻¹⁶ reported that high school and college counselors in their study viewed AIDS as one of the least important reasons why students do not enter allied health fields.

Although this study may not be representative of high school students in general, the results support the growing body of evidence that personal satisfaction, employment opportunities, and salary are among the most important factors that influence students' career choices.¹⁰⁻¹⁶ Annual data collected over the past two decades show that students are less interested in altruistic or social concerns and are increasingly interested in earning large amounts of money.^{17,18} Other related values that have dramatically increased in importance when making career choices relate to power and status.^{16,17} These findings notwithstanding, this study indicates that students have a favorable impression of the allied health professions and consider these careers to have middle to high social status.

Between 1966 and 1985, careers in business and engineering experienced the largest growth in student numbers, and were also the most common career choices for males in this study. However, it is promising to note that for the fourth consecutive year, the Astin survey shows that the popularity of business

careers fell to only 15.6%, while interest in the health careers rose to 12.9%.¹⁸ Further evidence suggests that there is growing interest in health careers. Nursing enrollments rose by 7.5% in 1991,¹⁹ and, for the first time since the 1983-1984 academic year, CAHEA reported an increase in the total number of graduates from accredited allied health programs.⁸

Studies have shown that parents play a crucial role in students' achievement and career choices.^{9,20-22} This study further demonstrated that parents have an important role in students' career choices and college decisions, while high school counselors are the least influential. Allied health recruitment should involve parents as much as possible. High school and college counselors are generally not well-informed about the allied health professions and they also do not have a significant influence on students' career choices or college selections.^{10,23,24} This study supports the conclusion that it is students themselves who ultimately decide which careers to pursue.¹²

CONCLUSIONS AND RECOMMENDATIONS

Data show that recruitment of students into a career should start at a young age, even before high school.^{2,3,24} Students begin actively planning for careers while in high school and there is much career exploration during their senior year.^{12,24} Unfortunately, at the college and high school level, students rarely get the opportunity to receive direct counseling from allied health faculty.¹⁰ Studies in nursing¹¹ and occupational therapy²¹ show that role modeling and nurturing relationships with high school students encourage students to choose those fields. Tours, buddy systems, school demonstrations, and career days are examples of activities that can introduce allied health to students. Rotations through academic and hospital departments are other ways that liaisons with schools and potential students can be developed.

Recruitment efforts should focus on increasing awareness of career opportunities in allied health; marketing the personal satisfaction, employment opportunities, and income potential of allied health careers; and actively competing for students who view nonhealth careers as more desirable. Efforts should be made to actively compete for male, minority, and nontraditional applicants. MCG has incorporated strategies to include successful male role models in all recruitment activities; use of gender-neutral marketing materials that incorporate nonsexist language and neutral or primary colors; and use of its marketing materials that highlight the male and minority segments of its student and alumni groups. Although this study focused on high school students, recruitment efforts have also been broadened to give greater attention to non-traditional applicants including older, re-entry, and career-change students. The marketing emphasis has shifted away from counselors and focuses much more directly on students and their families. Whenever possible, it is suggested that allied health students and alumni be actively involved in recruitment efforts. Hands-on demonstrations and up-close approaches are recommended

to keep recruitment strategies lively and personal from the potential students' perspective.

Since these strategies have been incorporated, the total number of applications to the MCG School of Allied Health Sciences has increased by 64%. The number of male applicants has increased by 64%, while the number of minority applicants has increased by 59%. Evaluation of additional data over the next few years is needed to assess the long-term effects of these recruitment efforts within MCG and at other schools of allied health. Further study is also needed on recruitment and retention strategies in allied health in order to initiate and evaluate mechanisms to maximize the number of qualified graduates. These and other creative approaches should be incorporated into an overall strategy to recruit from all age groups, especially because college students are generally older than before and because an aging society affords us opportunities to recruit from nontraditional cohorts.

REFERENCES

1. Institute of Medicine, National Academy of Sciences. *Allied Health Services: Avoiding Crises*. Washington, DC: National Academy Press; 1989.
2. Shepherd D. The collaborative roles of universities and hospitals in addressing the allied health manpower shortage. *J Allied Health*. 1990;19(4):287-295.
3. Blayney KD. The allied health professions: a critical resource in the future of health care. In: O'Neil EH, ed. *Perspectives on the Health Professions*. Durham, NC: Pew Health Professions Programs; 1990; 5-21.
4. *Seventh Report to the President and Congress on the Status of Health Personnel in the United States*. Washington, DC: US Department of Health and Human Services, Public Health Service Administration; 1990.
5. Fagin DM, Maraldo PJ. Feminism and the shortage: do women have a choice? *Nurs and Health Care*. 1988;9(7):365-367.
6. Johnston WB, Packer AE, eds. *Workforce 2000: Work and Workers for the 21st Century*. Indianapolis, Ind: Hudson Institute; 1987.
7. Committee on Allied Health Education and Accreditation. *Allied Health Education Directory*. Chicago, Ill: American Medical Association; 1990;281-283.
8. Committee on Allied Health Education and Accreditation. *Allied Health Education Directory*. Chicago, Ill: American Medical Association; 1991;309-310.
9. Buccelli PB, Hall BE, Johnston SL, Sherzer G, Kushner H. The impact of AIDS on recruitment in the health professions. *J Allied Health*. 1991;20(2):95-107.
10. Kosegi JE, Feeley MA. Survey of pre-allied health counselors: resources and perceptions. *J Allied Health*. 1989;18(3):249-259.
11. Grossman D, Arnold L, Sullivan J, Cameron ME, Munro B. High school students' perceptions of nursing as a career: a pilot study. *J Nurs Educ*. 1989;28(1):18-21.
12. Bross TM, Smugar C. Understanding factors involved in college choice: implications for baccalaureate programs in nursing and allied health. *J Allied Health*. 1986;15(3):193-199.
13. Marriner-Tomey A, Schwier B, Maricke N, Austin J. Sophomore high school students' perceptions of ideal and nursing career choices. *Nurs Forum*. 1990; 25(2):27-30.

14. Wagoner NE, Bridwell SD. High school students' motivations for a career as a physician. *Acad Med*. 1989;64(6):325-327.
15. Grandy J. In search of the next generation of scientists. *College Board Rev*. 1990;156:2-9.
16. Pearson R. Student aspirations decidedly financial. *Nature*. 1987;329(3):90.
17. Astin AW, Green KC, Korn WS. *The American Freshman: Twenty Year Trends 1966-1985*. Los Angeles, Calif: American Council on Education/UCLA; 1986.
18. Astin AW, Dey EL, Korn WS, Riggs ER. *The American Freshman: National Norms for Fall 1991*. Los Angeles, Calif: Higher Education Research Institute, UCLA; 1991.
19. Weithaus B, ed. Nursing school enrollments up. *Allied Health Education Newsletter*. 1992;23(1):3.
20. Slater M, Iler E. A program to prepare minority students for careers in medicine, science, and other high-level professions. *Acad Med*. 1991;66(4):220-225.
21. Wyrick JM, Stern EB. The recruitment of occupational therapy students: a national survey. *Am J Occup Ther*. 1987;41(3):173-178.
22. Madigan MJ. Characteristics of students in occupational therapy educational programs. *Am J Occup Ther*. 1985;39(1):41-48.
23. Berry TR, Dieter PM. Recruitment of physician assistants: implications for the future. *J Am Acad Phys Assist*. 1989;2(5):383-392.
24. Currey CJ. Choosing to become a PA: implications for student recruitment. *J Am Acad Phys Assist*. 1990;3(4):287-290.

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