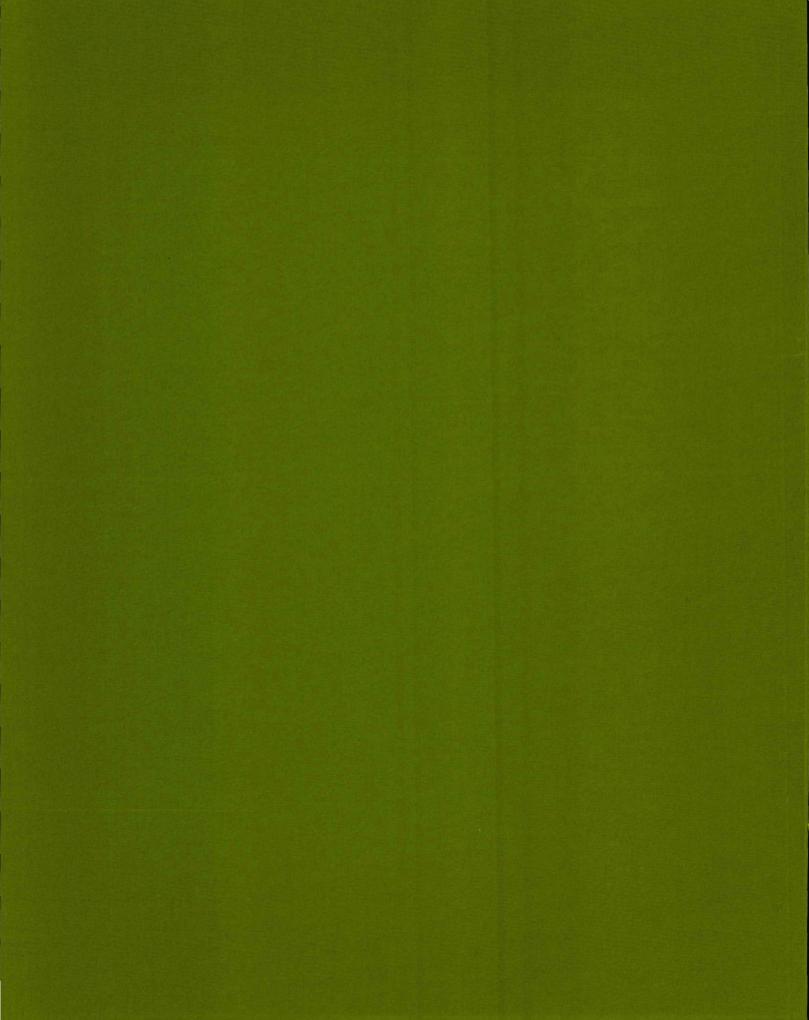
ACT RESEARCH REPORT





Summary

Students who approached college with different educational goals were compared on their average ability, grades, non-academic achievements, reasons for college choice, background, expectations concerning college, degree plans, and choice of major, vocation, and vocational role. The characteristics of students who chose each goal were summarized, and some implications for counseling were drawn.

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The Educational Goals of College-Bound Youth

Leonard L. Baird

American College Testing Program

College represents many things to college-bound students; for many students of lower status backgrounds, college represents the path to social mobility; for other students, it is primarily a preparation for a vocation or profession; and for others, it represents a release from parental control. Educators agree that the particular goals with which students approach college will affect their choice of college, and shape the experiences they will encounter. However, except for a few studies we know little about the way these values are related to the college experience. The present investigation was designed to gain information about the characteristics, expectations, and plans of students who approach college with different goals. In this study, college-bound high school students were simply asked to choose their most important goal in attending college from the following alternatives:

To learn how to enjoy life.

To develop my mind and intellectual abilities.

To secure vocational or professional training.

To make a desirable marriage.

To earn a higher income.

To develop moral standards.

To become a cultured person.

To develop my personality.

To develop a satisfying philosophy.

None of these.

While this list of goals is by no means complete, it represents many of those which college bound high school seniors would endorse. This study examined the aptitudes, achievements, aspirations, and motivations of students who chose each goal. We hoped to see if there were meaningful differences among those who have different goals and thereby examine the usefulness of the idea of "goals." Such information may help college counselors and others who are concerned with the hopes of entering college students.

Methods

This study grew out of the research of the American College
Testing Program, which administers tests of academic potential to
college bound students; this study analyses information obtained from
the ACT battery. Students who had different goals in attending college
were compared in several areas: ability, grades and achievement,
reasons for college choice, background, expectations concerning
college, degree aspirations, and choice of major, vocation and vocational role.

The Sample

The subjects were a three-percent representative sample of the population of approximately 612,000 students tested by ACT on national

test dates between November 1, 1964 and October 31, 1965. This sample was drawn by taking every 33rd, 67th, and 100th student on the master tape for each testing date. By this procedure, a sample of 18,378 students was obtained, of whom 10,073 were men, and 8,305 were women. These students, who completed the Student Profile Section of the ACT battery of tests as part of the regular assessment on the national testing dates, are representative of those who take the ACT battery.

Academic Potential and Grades

The ACT tests yield scores in the following: English, Mathematics, Social Studies, and Natural Science. The scores for each student were converted into ACT standard scores, with a mean of 20 and a standard deviation of approximately 5, based on collegebound high school seniors (American College Testing Program, 1965).

High school grades in the same four areas were self-reported.

Scores were assigned to the grades so that A = 4, B = 3, C = 2, D = 1,

and F = 0. [Research by Davidsen (1963) and Holland and Richards

(1965) indicated that self-reported high school grades correspond

closely to grades on official transcripts.]

Non-Academic Achievement Scales

Checklists of extracurricular activities, same as those used by Holland and Richards (1966), yielded scores in the following areas: Science, Art, Writing, Leadership, Music, and Dramatic Art. The Students with high scores on any of these scales presumably have attained a high level of accomplishment requiring complex skills, long term persistence, or originality. In several studies, these scales have shown reliabilities ranging from .65 to .84.

Reasons for College Choice

Students were asked to rate 22 items for their influence on their choice of college. Each student rated each influence according to the degree to which it had affected his choice. The statistic used here was the percentage of students in each classification who rated the influence "a major consideration." The influences fall into four general areas:

Atmosphere and reputation -- intellectual atmosphere, emphasis on religious and ethical values, good faculty, etc.

Facilities -- a special curriculum, presence of fraternities and sororities, etc.

Personal influence -- advice of parents, friends going, etc.

Other considerations -- size, low cost, location, etc.

Background

Students were asked to supply such background information as the location of their home, their age, and family income. Those students who considered family income confidential could so indicate without being required to give any other response.

Expectations Concerning College

Students were asked about such expectations as whether they would work, where they would live, and what activities they planned to participate in during college. The activities included music, writing, student government, science clubs, debate, acting, departmental clubs, and intercollegiate and intramural athletics.

Choice of Major, Vocation, and Vocational Role

Students were asked to choose from 86 possible fields the one which best described their planned college major and then, from the same list, to indicate their planned vocation. The choices of educational major were coded into nine areas: Social, religious, and educational fields; administrative, political, and persuasive fields; business and finance fields; scientific fields; engineering, agriculture, and technical fields; medical fields; arts and humanities; other; and undecided. The choices of vocation were coded into the same categories with the addition of the career of "housewife." Students also indicated the main role they expected to play in their future vocation, choosing among the roles of researcher-investigator, teacher-therapist, administrator-supervisor, promoter-salesman, practitioner-performer, none of these, two or more roles, and undecided or don't know.

Degree Plans

Finally, students indicated the highest level of education they expected to complete, choosing from the following: vocational or

technical program or junior college degree, bachelor's degree or equivalent, one or two years of graduate or professional study (M.A., M.B.A., etc.), doctor of philosophy (Ph.D.), doctor of medicine (M.D.), doctor of dental surgery (D.D.S.), bachelor of laws (L.L.B.), bachelor of divinity (B.D.), or "Other."

Statistics

The statistics used in this report are simple descriptive statistics—averages, percentages, and distributions. No tests of significance are reported for these data for several reasons. Little information would have been gained from tests of significance because the large N caused most comparisons to be significant—even small differences. Further, the distributions of percentages and other figures are typically self—explanatory. The reader can usually see when a particular difference is large enough to have some practical implication. Some information, such as reasons for college choice, is rather complex and is best interpreted as a whole. Finally, as Hays (1963) and others have pointed out, it is often hazardous to use multiple comparisons on a set of data. Because of statistical problems, one really has no way of telling how many of the significant results are due to chance alone or to some results dictating others.

Results

General

The majority of students gave greatest importance to two goals, with 51 percent choosing "to secure vocational or professional training," and 34 percent choosing "to develop my mind and intellectual abilities."

For the rest, about 7 percent chose the goal "to earn a higher income"; about 2 percent chose the goal "to become a cultured person"; 0. 6 percent chose "to learn how to enjoy life"; 0. 7 percent chose "to develop my personality"; 1 percent chose "to develop a satisfying philosophy"; 1 percent, half of them men, chose "to make a desirable marriage"; 1. 5 percent chose "none of these"; and only 44 students, 0. 2 percent, chose "to develop moral standards." Because so few students chose this last goal, it was not included in the analyses. The goals "to learn to enjoy life" and "earn a higher income" were more frequently endorsed by men, while the goals of "becoming a cultured person" and "develop my personality" were more frequently endorsed by women.

Ability, Grades, and Achievement

The ACT scores and high school grades of students who chose each goal are shown in Table 1. Students who chose the goal of developing a philosophy had the highest ACT scores on three of the four tests and the highest composite. They had the third highest grades in all areas. Students who chose the goal of developing their personality had the second highest mean ACT scores in three of the four areas and had the highest grades in every area except social studies. Students who wished "to make a desirable marriage" had the lowest composite ACT score. Students who chose the goal of earning a higher income had the lowest mean score on the ACT English test and the lowest grades in every area. Students who chose the goal of becoming a cultured person had the lowest mean

Table 1

Comparison of Students with Different Goals for College on ACT
Scores and High School Grades

	Enj.	Dev.	Voc.		Higher	Cultured	Develop	Philo-	None of
ACT Score	Life	Mind	Prof. Tr.	riage	Inc.	Person	Person.	sophy	These
English									
Mean	17.3	19.4	19.0	17.6	16.7	18.2	20.2	20.0	18.4
S.D.	6.0	5.1	4.8	4.7	5. 1	5, 0	5.3	5.0	5. 1
Math.									
Mean	19.0	20.2	19.9	18.3	19.1	18.3	20.0	21.2	19.2
S.D.	6.8	6.8	6.5	6.1	6.3	5.9	6.5	6.8	6.6
Soc. Stds.									
Mean	20.1	21.4	20.9	18.7	18.8	19.3	22.3	22.7	20.7
S. D.	7.2	6.5	6.0	6. 2	6. 5	6.2	6.6	6.0	6.5
Nat. Sci.									
Mean	19.8	20.8	20.9	18.8	19.1	18.5	20.9	21.6	19.9
S.D.	6.8	6.2	5.8	6. 1	6.3	5.8	5.9	5.9	6.2
Composite									
Mean	19.2	20.6	20.3	18.5	18.6	18.7	20.9	21.5	19.7
S.D.	5.9	5.3	4. 9	4.9	5. 2	4.8	5. 1	5.0	5. 2
Grades									
English	2.49	2.79	2.67	2.52	2.31	2.67	2.88	2.78	2.52
Math.	2.20	2.42	2.36	2.22	2.11	2.29	2.57	2.40	2. 23
Soc. Stds.	2.54	2.87	2.74	2.60	2.47	2.71	2.84	2.82	2.61
Nat. Sci.	2.40	2.57	2.47	2.30	2.23	2.52	2.62	2.55	2.34
Total	2.41	2.66	2.56	2.41	2.28	2.54	2.73	2.63	2.43
S. D. Total	. 69	. 72	. 70	.65	. 67	. 72	.65	. 74	. 71

scores on the ACT mathematics and natural science tests; their grades were about average.

The scores of the students on the non-academic achievement scales are shown in Table 2. The differences among the groups tended to be small, but there were some differences worth comment. The students who chose the goal of developing their mind had at least one achievement in leadership more often than others. Students who were interested in marriage showed relatively little achievement in science, art, writing, and dramatic art. Students who chose the goal of earning a higher income also showed less achievement in science, art, writing, and dramatic art. Students who chose the goal of becoming a cultured person showed more frequent achievement in leadership, music, and dramatic art. Students who chose the goal of developing their personality seldom reached high levels of achievement in science, art, leadership, and music. Students who chose the goal of developing a philosophy had slightly more frequent achievement in writing and dramatic art. Reasons for College Choice (Table 3)

Students who chose the goal of learning to enjoy life gave less importance to a college's progressive atmosphere, national reputation, special curriculum, size, or location. Students who chose the goal of developing their mind tended to emphasize an institution's intellectual atmosphere, quality of faculty, national reputation, high scholastic standards, and quality of facilities. They were also more often influenced by a high school teacher than any other group. Students who came to

Table 2

Comparison of Students with Different Goals for College on Non-Academic Achievements

	Enj.	Dev.	Voc.	Mar-	Higher	Cultured	Develop	Philo-	None of
	Life	Mind	Prof. Tr.	riage	Inc.	Person	Person.	sophy	These
Science									
Rare Ach(4-8)	4.9	6.9	5.2	2.8	3. 7	3.3	2.3	5 <i>.</i> 5	3.4
Mod-High(1-3)	32.1	34.0	31.4	32.1	33.4	32.5	31,4	29. 2	33.9
No Ach(0)	63.0	59.1	63.5	65.4	62.8	64.3	66.3	65.2	62.3
Art									
Rare Ach(4-8)	1.2	3.7	3.2	2.0	2.7	4.1	1.2	4.2	6. 9
Mod-High(1-3)	23.2	26.5	24.0	19.6	21.3	28.0	26.8	30.1	31.0
No Ach(0)	75.6	69.9	72.6	78.4	76.0	67.8	72. 1	65. 6	62.0
Writing									
Rare Ach(4-8)	7. 4	5.7	3.9	4.6	2.2	5. 2	4.7	5.5	7. 6
Mod-High(1-3)	44.5	49. l	41.0	34.9	32.7	50.4	48.3	49.7	41.5
No Ach(0)	53.1	45.2	55. 1	6 0. 5	65.0	48.4	47.1	44.7	51.0
Leadership									
Rare Ach(5-8)	10.8	16.3	13.2	9.7	10.5	17.0	7.8	14.4	11.2
Mod-High(1-4)	68.8	66.1	65.2	67.8	60.7	63.7	69.7	61.5	62.8
No Ach(0)	20.5	17.5	21.6	22.6	28.9	19.2	22. 5	24.1	26.0
Music									
Rare Ach(4-8)	18.0	17.7	15.7	13.1	11.3	21.2	9.0	17.4	13.2
Mod-High(1-3)	35.0	30.0	38.7	36.6	29.2	40.4	47.7	38.6	38. 9
No Ach(0)	47.0	42.4	45.7	50.3	59.7	38. 3	43.2	44.0	47 . 9
Dramatic Arts	3								
Rare Ach(4-8)	10.8	10.9	8.3	5. 9	6.9	13.3	13.6	14.1	9. 9
Mod-High(1-3)	45.8	47.6	44.6	51.7	35.3	46.5	39.8	39. 3	43.7
No Ach(0)	43.4	41.5	47.2	42.5	57 . 7	40.1	46.6	46.6	46.5

college for vocational or professional training emphasized the special curriculum of their college. They were relatively frequently influenced by a high school teacher. Students who emphasized marriage said they were influenced by a high school or college counselor more frequently than any other group. They claimed that social opportunities influenced. them with lower frequency than any other group. Students who chose the goal of earning a higher income least frequently gave consideration to the college's intellectual atmosphere, religious or ethical emphasis, progressive or liberal atmosphere, quality of faculty, national reputation, or high scholastic standards. They gave relatively greater emphasis to the college's athletic program, location, and proximity to their home, and the attendance of their friends. Students who chose the goal of becoming a cultured person emphasized the college's progressive or liberal atmosphere, social opportunities, national reputation, and the presence of fraternities or sororities. They were more frequently influenced by a campus tour and less frequently by low cost. Students who chose the goal of developing their personality tended to emphasize the college's religious or ethical emphasis, social opportunities, and size as important factors in their choice. They were less frequently influenced by the quality of the facilities. These students were more often influenced by the advice of their parents and less frequently influenced by a high school teacher or high school or college counselor. Students who chose the goal of developing a philosophy of life emphasized the progressive and liberal atmosphere of the college.

Table 3

Comparison of Students with Different Goals for College on Reasons for College Choice (Percent Rating Each Choice as a "Major" Consideration)

Reasons for Choice	Enj. Life	Dev. Mind	Voc. Prof. Tr.	Mar- riage	Higher Inc.	Cultured Person	Develop Person.	Philo- sophy	None of These
Atmosphere, Rep.		"				·			
Intellectual Atmos.	30.8	53.1	39.7	40.1	27.2	46.1	41.7	45.8	29.7
Religious Eth. Emp.	26.4	28.7	21.9	31.4	12.6	32. 6	33.1	25.4	24. J
Progressive Liberal	21.9	32.6	27.0	29.9	21.4	36.2	29.8	36.7	22 . 5
Social Opportunity	47.7	38.0	35. 4	33.2	37.2	51.7	53.7	42.1	30.2
Good Faculty	59.8	71.3	62.6	65.5	· 53.8	61.0	60.5	67. 1	57.9
National Reputation	32.0	44.9	42.2	42.7	32.8	45.8	36.7	36. 5	26.4
High Scholastic Stds.	51.4	70.0	61.4	60.0	47.9	60.4	60.5	61.9	47.5
Facilities, Program									
Special Curriculum	42.5	57.6	59.9	46. 4	43.0	54. 6	50.0	58.1	5 4 . 9
Good Facilities	41.1	44.2	41.5	36.6	34.6	43.3	33.9	44.3	35. 4
Good Athletic	21.5	14.8	16.8	21.1	27.0	17.5	14.2	13.8	. 19. 3
Fraternity & Sorority	10.6	6.5	6.5	8.9	9.4	15.1	6.7	7. 8	3.6
Personal Influences									
Advice of Parents	33.6	38.1	37.3	40.6	31.0	38.2	41.3	30.0	34.7
Adv. of H.S. Teacher	20. 6	25.6	2 5.5	31.3	23.0	24.1	16.5	23.8	21.0
Adv. of H.S. Col. Couns.	29.5	36.7	36.2	40.1	31.3	34.0	25.6	28.7	30.4
Col.Admissions Off.	21.6	32.7	28.5	33.2	24.6	33.7	30.0	29 . 5	22.8
Friends Goin'g	13.1	7.1	8.7	11.5	13.5	11.6	12.5	7.1	6.9
Campus Tour	29.8	35.6	33.1	31.4	25.4	41.7	32.8	28.6	21.6
Other									
Financial Aid	19.4	22.9	20.4	24.3	20.4	19.1	20.5	22.9	16.5
Low Cost	41.1	35.9	39.5	39.2	43.8	31.8	40,0	41.0	35.4
Size	19.6	26.3	25.7	22.1	24.2	30.6	34.1	26.2	24.9
Location	48.6	51.0	56 .0	52.6	57.8	5 4.4	5 2 . 5	51.0	50.7
Close to Home	40.2	34.3	40.3	41.5	46.0	38.3	34.4	35.7	37.7

its special curriculum, and the quality of its facilities. They placed little emphasis on the athletic program. They were least frequently influenced by the advice of their parents.

Background

Table 4 shows the average age and family income of the students choosing each goal as well as the percentage of students whose home is on a farm or in the open country. Students who chose the goals of "enjoy life" and "earn a higher income" more frequently came from rural backgrounds, while students who chose "developing a satisfying philosophy" less frequently did. Students who chose the goal of becoming a cultured person were slightly younger than other students, while students who chose "philosophy" were slightly older (the means had a range of about four months). Students who chose marriage as their goal tended to come from families with lower income than others, while students who chose "to become a cultured person" came from families with slightly higher income.

Expectations Concerning College

The expectations of each group of students concerning college are shown in Table 5. Students who chose the goals of higher income or developing their personality were likely to expect to work. Students who chose the goals of learning to enjoy life or becoming a cultured person were the least likely to expect to work. Students who chose the goal of higher income were most likely to expect to participate in intercollegiate athletics and the least likely to expect to participate

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Table 4

Comparison of Students with Different Goals for College on Background Characteristics

	Enj. Life	Dev. Mind	Voc. Prof. Tr.	Mar- riage	Higher Inc.	Cultured Person	Develop Person.	Philo- sophy	None of These
Percent Whose Homis on a Farm or in Country	31.2	23. 1	27.3	21. 5	31. 4	21.9	22.4	15.6	26.2
Median Family Inc.	8,800	8,440	8,000	7, 50 0	7, 890	9,220	8, 590	8,330	7, 940
Mean Age	18.02	17.97	17.95	17.92	18.12	17.89	17.94	18.22	18.08

Table 5

	Enj.	Dev.	Voc.	Mar-	Higher	Cultured	Develop	Philo-	None of
	Life	Mind	Prof. Tr.	riage	Inc.	Person	Person.	sophy	These
Percent Who Expect		•				•			
to Work	52.8	57.1	60.2	62.9	66.3	50.5	65.3	61.1	59. 1
Percent Planning to									
Participate in:									
Intercollegiate Ath.	35.5	29.7	31.8	32.7	42.7	32.8	27.4	31.3	37.8
Music	31.5	38.3	31.9	31.6	20.8	39. 9	37.6	33.8	3 3 .8
Writing	41.7	39.6	28.2	29.4	21.0	40.8	39 <i>.</i> 8	47.4	31.2
Student Govt.	48.1	56.8	46.6	44.3	36.4	59.1	56.8	45.8	45.9
Science Clubs	24.1	33.2	31.7	29.4	29. 4	20.3	21.0	28.4	23.0
Debate	15.7	25.2	17.6	15.5	16.6	21.6	20.8	26.9	21.4
Acting	28.7	30.6	24.5	26.8	19.4	38.9	29.0	32.7	3 0 . 1
Departmental Clubs	74.1	87.7	86.7	79. 4	72.6	84.4	82.4	80 . 6	76.6
Intramural Ath.	64.2	53.7	55 . 4	56.7	62.6	51.0	50.0	51.2	52.0

in music, writing, student government, acting, or departmental clubs. Students who chose the goal of becoming a cultured person were the mirror of this pattern. They were most likely to expect to participate in music, student government, and acting and also the least likely to participate in science clubs. Students who hoped to develop their personality were less likely to expect to participate in intercollegiate athletics, intramural athletics, or science clubs. They frequently expected to participate in student government. Students who chose the goal of developing their mind were more likely than other students to expect to participate in science clubs, departmental clubs, and student government.

Vocational Choice, Vocational Role, and Degree Goal

The educational major, vocational choice, and vocational roles of students with different goals are shown in Table 6. Their degree goals are shown in Table 7. The most distinctive group is composed of students who chose the goal of higher income. They more frequently chose majors and vocations in administrative, political, and persuasive fields, business and finance fields, and engineering, agriculture, and technical fields. They less frequently chose social, religious, or educational fields. They were also the most frequently undecided about their major (27.8 percent) and vocation (38.4 percent). Consistent with these results, they were least likely of all groups to choose the role of teacher or therapist and most likely to choose the role of administrator or supervisor. A third (33.8 percent) were undecided or didn't

Table 6

Comparison of Students with Different Goals for College on Educational Major,
Vocational Choice and Preferred Vocational Role

	Enj.	Dev.	Voc.		-	Cultured	Develop	Philo-	None of These
	Life	Mind	Prof. Tr.	riage	Inc.	Person	Person.	sophy	Inese
Education Major									
Social Religious Ed.	18.2	25.8	25.3	2 7. 9	10.7	29.7	30.6	22.2	32.3
Adm. Pol. Persuasive		10.8	9.3	6.6	13.9	10.8	4.8	12.3	6. 0
Business Finance	6.4	6.0	9.0	6.6	12.6	8.1	10.5	4.2	4.6
Scientific	4.5	9.9	6.3	3.6	5.8	3.3	5.6	7. 1	4.9
Eng.Agric.Technical	13.6	8.5	13.9	11.2	16.0	6.0	5.6	4.7	9. 1
Medical	8.2	7.6	13.7	12.2	5, 3	5 . 5	6. 5	11.8	8.8
Arts & Humanities	14.5	11.3	8.4	8.1	5.8	16.4	13.7	18.9	10.5
Other	4.5	l.4	1.8	3.0	2.0	2.5	4.0	0.5	4.2
Undecided	20.9	18.7	12.3	20.3	27.8	17.6	18.5	18.4	19.6
Vocational Choice									
Social Religious Ed.	20.0	23.9	24.0	22.2	7.1	23.3	24.2	20.5	30.2
Adm. Pol. Persuasive	5.5	8.9	7.3	5.7	10.9	9.9	2.4	11.9	4.6
Business Finance	5.5	4.9	8.4	5.7	9.9	5.8	8.1	2.9	2.1
Scientific	1.8	4.8	3.4	3.6	3.2	0.8	3, 2	4.3	2.5
Eng.Agric.Technical	8.2	7.3	11.3	8.2	12.3	4.3	4.0	5. 2	6.7
Medical	8.2	7.6	13.8	9.3	4.4	4.6	4.0	11.4	7.0
Arts & Humanities	6 .4	8.0	6.0	3.6	3.9	9.6	8.9	9.5	7.7
Housewife	0.9	1.3	0.7	7.7	0.5	3.3	8. 1	2.9	2.1
Other	8.2	7. 2	7. 9	8.2	9.4	8.4	6.5	7. 1	12.3
Undecided	35.5	26.1	17.4	25.8	38.4	30. 1	30.6	24.3	24. 9
Preferred Vocational	Role								
Researcher	7.5	10.5	7. 3	3.3	7.0	4,5	5. 0	10, 3	5. 5
Teacher-Therapist	21.5	26.8	26.4	2 3.8	9.6	23.9	22.7	17.7	26.2
Adm-Supervisor	8.4	8.4	8.8	9.9	13.3	7.4	6. 7	6. 4	4.7
Salesman	2.8	2.8	3. 1	7. 2	6. 2	4.7	5. 0	3. 0	2.2
Practitioner	14.0	14.2	21.8	17.7	13.8	15.3	15.1	20.7	13.5
None of Above	14.0	10.9	13.0	17.1	14.5	16.3	17.6	14.8	17.8
Two or More	7.5	4.8	3. 2	2.8	1.9	3. 9	4.2	7.4	4.4
Don't Know,Undecided		21.6	16.5	18.2	33.8	23.9	23. 5	19.7	25.8

Table 7

Comparison of Students with Differing Goals for College on Degree Goals
(Percent Choosing Each Degree)

	Enj. Life	Dev. Mind	Voc. Prof. Tr.	Mar-	•	Cultured	Develop	Philo-	None of
Degree		Willia	Froi. ir.	riage	Inc.	Person	Person.	sophy	These
College-No B.A	. 22.4	13.9	17.0	26.4	25.8	18.9	22.4	10.0	19.1
B. A.	40.2	45.3	48.1	41.6	46.9	48.4	45.6	46.2	42.2
1, 2 yrs. M.A.	22.4	26.1	21.6	19.3	15.6	22.9	23.2	24.3	20.6
Ph. D.	4.7	5.4	2. 1	1.5	1.5	3.3	2.4	10.5	4.6
M. D.	4.7	2.8	3.3	2.0	1.4	1.3	1.6	3.8	2.8
D. D. S.	0.9	0.6	1.3	2.0	1.0	0.5	0.0	0.0	0.4
L, L. B.	0.0	2.5	2.0	2.0	2.8	1.5	0.0	1.9	0.4
B. D.	0.0	0.4	0.3	0.0	0.1	0.0	0.0	1.4	0.4
Other	1.9	2.5	3.8	4. l	3.7	2.0	4.8	1.4	7.1
Total, Profess	ional								
Level Degree	10.3	11.7	12.8	7.5	6.8	6.6	4.0	17.6	8.6

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know about their vocational role. About a quarter (25.8 percent) did not plan to obtain a bachelor's degree, and a smaller proportion than any other group (22.3 percent) planned to obtain an advanced degree of some kind.

Students who chose the goal of developing their personality were also distinctive. They most frequently chose majors and vocations in social, religious, and educational fields and least frequently chose majors and vocations in administrative, political, and persuasive fields, or engineering, agricultural, and technical fields. They least frequently aspired to any degree beyond the master's.

Students who chose the goal of vocational or professional training more frequently than students choosing other goals chose majors and vocations in medical fields and were least often undecided. They preferred the role of practitioner and were least often undecided about a vocational role. They frequently planned to obtain a degree beyond the master's.

Students who chose the goal of "developing a satisfying philosophy" seldom chose majors and vocations in business and finance fields, or in engineering, agricultural, and technical fields. They chose arts and humanities fields, medical fields, and administrative, political and persuasive fields somewhat more frequently than other groups. They chose the roles of researcher and practitioner somewhat more frequently and the role of administrator or supervisor less frequently than other groups. This last choice is not completely consistent with

their vocational choice, perhaps because administrative, political, and persuasive fields include international relations, law, history and foreign service, among others. This group was also the least likely to think they would forgo a bachelor's degree and the most likely to plan to work for a degree beyond the master's, especially the Ph.D., which they planned twice as frequently as any other group.

Students who chose the goal of developing their mind and intellectual abilities chose scientific fields and the role of researcher more frequently than any other group. They frequently (37.8 percent) planned to obtain some degree beyond the B.A. In contrast, those who chose the goal of becoming a cultured person frequently chose arts and humanities fields and relatively less frequently chose scientific, engineering, agricultural, or technical fields, or the role of researcher. They seldom planned to obtain degrees beyond the master's.

Summary of Group Characteristics

The differences among students who chose each goal can be seen more sharply by summarizing the characteristics which distinguished each group. Of course, these summaries are based on averages, and the variation within each group is large.

Enjoy Life

The students who chose the goal "to learn to enjoy life" frequently came from rural backgrounds. They had low to average grades in high school and average ACT scores. Their non-academic achievements in high school were average in all areas. In choosing a college, they

were less influenced by its progressive atmosphere, reputation, special curriculum, size, or location. Some were influenced by the attendance of their friends. They were less likely to expect to work in college but more likely to plan to participate in athletics. They were frequently undecided about a vocational choice and chose two or more vocational roles more frequently than any other group. Some planned medical degrees.

Develop Mind

A third of the sample chose the goal of developing their mind.

The students who chose this goal had high grades in high school, and had high ACT test scores. They had more achievements in leadership than other students. Their choice of college was influenced by a number of considerations concerning the intellectual quality and reputation of the school. They were more frequently influenced by a high school teacher than any other group. They expected to participate in science and departmental clubs and student government. While they chose many vocations, they chose scientific majors and vocations and the role of researcher more frequently than any other group. They frequently planned to obtain a master's degree.

Vocational or Professional Training

Half (51 percent) of the students chose the goal of vocational or professional training. Students who chose this goal came from families with slightly lower family income than most other groups. Their high school grades and ACT test scores varied widely, but their means were

about average. Their non-academic achievements were average. They emphasized the presence of a special curriculum in their choice of a college. They planned to participate in departmental and science clubs. Among all the groups they were the least often undecided about major, vocation, or vocational role choice. They often chose medical fields as majors and vocations and most often chose the role of practitioner. They frequently planned some degree requiring work beyond the master's level.

Marriage

The men and women who chose marriage as their goal often came from families with low incomes. They had moderately low high school grades and low means on the ACT tests. They showed fewer non-academic achievements in several areas than other students.

They were frequently influenced by a high school teacher or college counselor in their choice of college. They said they were not influenced by social opportunities available at their college. They chose a wide variety of majors but least frequently planned vocations in the arts and humanities. One out of four did not plan to obtain a bachelor's degree.

Higher Income

Students who chose higher income as their goal frequently came from low-income families and rural backgrounds. They had the lowest grades of any group in high school; they also had low mean scores on the ACT tests. They showed less achievement in most non-academic areas, especially music and dramatic art. Their choice of college

was little influenced by its intellectual qualities, ethical emphasis, or liberal atmosphere. They were influenced by its location, athletic program, and the attendance of their friends. Two-thirds expected to work. Perhaps because of their anticipated employment, they did not expect to participate as frequently as other students in music, writing, student government, acting, or departmental clubs at their college but did expect to participate in athletics. They were most likely to be undecided about their major and vocational choice and seldom chose careers in medical fields, arts and humanities, or social, religious, or educational fields. They most often chose majors in the "practical" fields: administrative, political, and persuasive; business and finance; and engineering, agricultural, and technical fields. A third were undecided about a vocational role, but they chose the role of administrator-supervisor relatively frequently. Few planned advanced training beyond the master's.

Become a Cultured Person

The students who chose the goal of becoming a cultured person tended to come from high income families. They had moderately low mean ACT scores but had average high school grades. The had relatively frequent achievements in the areas of leadership, music, and dramatic art. Their choice of college was more frequently influenced by its liberal atmosphere, social opportunities, national reputation, and the presence of fraternities and sororities on campus. They were less frequently influenced by the low cost of the college. They were most

likely to expect to participate in music, student government, and acting. They were less likely to plan to work or participate in science clubs. They were least likely to make vocational choices from scientific, engineering, agricultural, or technical fields and most likely to choose from the arts and humanities. They seldom planned any advanced degree.

Develop Personality

The students who chose to develop their personality were somewhat younger than their classmates, on the average. Their ACT test score means were high, and they had the highest average high school grades of any group. These students were often influenced by the advice of their parents in their choice of college and emphasized the college's progressive and ethical atmosphere, social opportunities, and size. They planned to participate in student government more frequently than other groups and less frequently planned to participate in athletics or science clubs. They seldom chose majors or vocations in administrative, political, or persuasive fields; engineering; agricultural or technical fields; or medical fields. They more frequently chose majors and vocations in social, religious, and educational fields. Many of the women in this group chose the career of housewife. Very few (4.0 percent) planned an academic or professional degree beyond the master's level.

Develop a Philosophy

Students choosing to develop a philosophy came predominantly from urban backgrounds. They tended to be slightly older than other

students. They had the highest mean ACT scores and moderately high grades in high school. They achieved slightly more frequently than others in the areas of writing and drama. Their choice of college was influenced by its liberal atmosphere, special curriculum, and quality of facilities. They were little influenced by advice of their parents or the colleges' athletic program. They planned to participate in writing and debate. They most frequently chose majors in the arts and humanities or administrative, political, or persuasive fields. They least frequently chose majors in business and finance fields, and engineering, agricultural, or technical fields. Their choices of vocations followed the same pattern. They frequently chose the vocational role of researcher and least frequently chose the roles of administrator-supervisor or salesman. Nearly 40 percent, considerably more than any other group, planned some advanced degree beyond the B. A.; a particularly high proportion aspired to the Ph. D. degree.

Discussion

Other research has indicated the importance of goals and values in the areas of occupational choice, educational plans, and student opinion (Rosenberg, 1957; Davis, 1965; Goldsen et al., 1960). The present research tends to support the earlier studies of occupational choice, but, in contrast to these studies, focused on the correlates of educational rather than occupational values. Educational goals are clearly related to the reasons students give for choosing a college and to the college activities in which students plan to participate. Of course,

educational goals are related to educational plans. Taken together, these results indicate that educational goals have a considerable relation to the expectations and plans of college bound students.

It could be argued that some of the relation between goals and plans is due to initial differences in academic ability. This does not seem to be the case, however. For example, degree plans should be strongly influenced by initial ability. If we compare the mean on the ACT test composite for students who chose the goal of developing their personality with those who want to develop a philosophy we find that these two groups are nearly equal; indeed, these two groups have the two highest mean ACT scores. However, those who choose to develop their personality have the least aspiration to any professional level degree, while those who choose to develop a philosophy have the greatest aspiration. The other relations tend to indicate the same result. It seems, then, that differences in academic aptitude cannot account for these findings.

If we interpret these results in a global manner, it appears that the different goals chosen by students range from the pragmatic to the idea-oriented and from the broad and expressive to the narrow and particular. The most striking differences seem to be between the students who chose "to earn a higher income" and those who chose "to develop a satisfying philosophy." These two groups were opposites on both dimensions. The students who sought vocational or professional training tended to be pragmatic and narrow while those who sought to

develop their minds and intellectual abilities were more idea-oriented and expressive. Students who wished to "become a cultured person" are not pragmatically oriented but they also seem less interested in ideas than in art, music, and opportunities for expression. Those who chose the goal of marriage have a very narrow pragmatic objective. Those who planned to learn to enjoy life seemed to be pragmatic, but had a very broad goal, while those who wished to develop their personality seemed only moderately idea-oriented, but had a very broad goal.

It seems most useful however, to consider each goal separately. This is not a simple task because the data about each goal is not easily interpreted. In general, the students choosing each goal were different, but the differences were not large. Since half the students chose one goal, 85 percent chose one of two goals, and 92 percent chose one of three goals, the comparisons are often based on very small groups. The diversity of students who chose the two main goals of vocational or professional education and development of the mind renders it hazardous to base predictions on knowledge of goals alone.

Many students, however, could be helped by discussing their purposes in attending college. For example, the student who wants vocational or professional training from college will often expect college to provide him with specific instruction. He may expect answers, facts, and skills which he thinks are needed for the job. He may feel that courses in English, social science, and the humanities are irrelevant

to his goals. He may prefer the structure and detailed facts of vocational instruction to the ambiguous and abstract quality of general education. When he enters college he may be disturbed by the lack of structure he finds there. He will find that instructors and textbooks do not always "have the answers," and that there are often no "right" answers at all. Many students in this group may face difficult adjustments in college. Counselors and professors should become acquainted with their problems.

Another student may choose the goal of developing his personality. He would probably benefit from a discussion of what this goal means and from a consideration of the experiences which would help him attain it. What major field, classes, social activities, extra-curricular activities, and organizations would help him achieve his goal? Is his goal a temporary one, or is it a well-considered choice which is central to his purposes in life? Does it represent a mature or immature view of college? In all of this, a good counselor or advisor can help a student come to terms with his college experiences and his own choices.

Perhaps most important, students should have an opportunity to review their hopes and purposes for college. Most students would profit from a discussion of their expectations concerning college and from thinking about the kind of person they hope to become. Students can be helped to approach their college career with clearer purpose and greater readiness to attain their goals.

¹There are some valuable ideas on these subjects in a fine book written for college freshmen by Virginia Voeks (1957), titled On Becoming an Educated Person.

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