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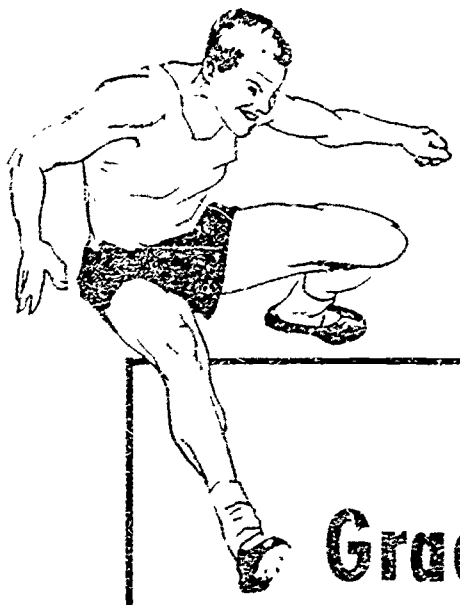
ABSTRACT

A questionnaire was administered to 5,175 seniors in 101 randomly selected high schools to measure the effects of familial economic factors, proximity to higher education institutions, scholastic standing, peer values and influences, familial values and influences, impact of the secondary school guidance program, social class and sex on plans to enter higher education institutions. About two-thirds of the students reported plans to continue their education; significantly more boys and girls planned to do so; the majority of students planned to attend public institutions, and most planned to study in New York State; there was strong correlation between social class and college interest, and a close relationship between class rank and test scores. Parents exerted the greatest influence upon the student's future plans, but more so on boys; girls tended to be more influenced by their peers. College-bound students received more individual counseling than those not planning to attend college; parents seemed somewhat more reluctant to assume financial obligations for their daughter's education than for their sons; and proximity to college did boost college-going rates. Follow-up studies will be published in the Spring of 1970. (AF)

A Longitudinal Study of The Barriers Affecting The Pursuit of Higher Education By New York State High School Seniors



PHASE I

Grades

Motivation

Socioeconomic Class

Money

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Office of Planning in Higher Education
Albany, New York 12224
August, 1969

FOREWORD

The Regents of the University of the State of New York requested that research be undertaken to ascertain the reasons for the loss of talented students from the formal educational structure at the end of high school. In order to fulfill this request, the Bureau of Research in Higher and Professional Education began a longitudinal study of the barriers which act as preventatives to students seeking higher education. The study is structured in three phases. This report contains only the findings of the first phase. The second phase of the study, which is now in progress, involved a followup of the original respondents by questionnaire. The third phase of the study will incorporate personal interviews with the respondents. The final report of the longitudinal study will present the implications and recommendations.

The design of the study was formulated by Carl E. Wedekind, Director, Division of Research, Office of Research and Evaluation, who originally had the administrative responsibility for the Bureau of Research in Higher and Professional Education. Many individuals have contributed to the publication, but the final responsibility for the analysis of data and preparation of this report rested with Helen Bickel Wolfe, Associate in Education Research.

William N. Smith, Director
Office of Planning in Higher Education

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I. INTRODUCTION

This study was undertaken to investigate the barriers which high school seniors encounter as they attempt to go on to higher education. There are several reasons for concern about the postsecondary plans of the seniors. The first relates to the need for accurate information concerning the enrollment plans which enables college administrators and those engaged in higher education planning to adequately assess the demand for higher education. A second impetus for research stems from societal needs for an augmented supply of workers in a variety of fields. To this end, efforts are being made to determine to what extent the Nation is utilizing its available supply of youth. As a result, educators and researchers have analyzed the postsecondary plans and activities of youth to determine if the manpower resource is being prepared to make a meaningful contribution to society. Recently, concern has risen over the waste of talented high school graduates who fail to attend institutions of higher education and are subsequently lost to the professional manpower pool.

This study attempts to examine the effects of certain inhibitory factors upon the plans of high school seniors in New York State. The variables operating as barriers postulated for this study were familial economic factors, proximity to higher education institutions, scholastic effects, peer values and influences, familial values and influences, impact of the secondary school guidance program, social class, and sex.

The initial phase of the three-part study was begun in June 1968, by the Bureau of Research in Higher and Professional Education. In addition to examining the plans of high school seniors, the first phase of the study was also designed to serve as a pilot study concerned with the

feasibility of conducting an annual statewide followup of all New York State's high school graduates.

The exact procedures for sample selection and questionnaire administration appear in the section entitled METHODS AND PROCEDURES. The instrument used in data collection appears in Appendix C. The second phase of the study, which is now in progress, involved random selection of a subsample composed of 20 percent of the original respondents and mailing them a followup questionnaire. The final phase of the study incorporates personal interviews with a representative group responding to both questionnaires. It is anticipated that all three phases will be completed by the spring of 1970. Only the results of the first phase appear in this publication.

II. SURVEY OF LITERATURE

Past studies seem to have been organized in three geographical categories: (1) the intrastate study which concentrates on a section of a state or perhaps even a single city, (2) the statewide study which samples a large proportion of the graduating seniors, and (3) the national study which attempts to sample representative areas of the Nation.

The objectives of the studies are threefold: (1) the "post facto" study delineates the activites of the graduates 1 year or more after their graduation, (2) the analytical study examines the effects of single or multitudinous variables upon postsecondary planning, and (3) the study of lost talent which is found among high ability youth who fail to continue their education.

The data collection techniques used by the researchers seem to follow a similar pattern, the most frequent being a questionnaire sent to

students, parents, and/or school administrators. A second technique is the use of personal interviews with students, parents, and/or school officials.

The most frequently sought information relates to the student's immediate plans, his attitudes towards high school experiences, his perceptions of the college experience, the influence of significant individuals, family financial status, social status, educational level of his parents, proximity to higher education institutions, effectiveness of guidance and counseling, and community influence.

A. Research Conducted by the New York State Education Department

The New York State Education Department has been examining the postsecondary plans of New York State youth for more than 30 years. In 1938, Ruth E. Eckert and Thomas O. Marshall published an exhaustive study entitled, When Youth Leave School. The major emphasis was on determining the characteristics of pupils and their adjustments to postsecondary environments. While in 1938, the need was more for retaining students in the secondary schools than encouraging college attendance, we are, nevertheless, provided with information about their postsecondary educational plans. The investigators found that 24.80 percent and 26.50 percent respectively of male and female graduates anticipated attending an institution of higher education. In this study, vocational goals were correlated with intelligence, class rank, and socioeconomic class. Even in this early study, poor motivation and talent loss were clearly appreciated as indicated by the following:

> There is just as much ground for disquiet in the fact that of all the pupils indicating choice that will involve no college study, from a fifth to a fourth are clearly superior in intelligence to the average student specifying some professional goal. (Eckert and Marshall, 1938)

In 1946, Philip A. Cowen published, A Study of Factors Related to Attendance in New York State, which examined the thesis ". . . that youth in all parts of the State should attend college to about the same extent." The report yielded information relevant to attendance as it related to the proximity of higher education institutions, and the impact of economic, social, and local school factors. He found that, "the presence of a college in a community seems to about double the percentage of youth who attend college from the local area."

In 1955, the New York State Education Department issued the booklet, Crucial Questions About Higher Education, the second and third chapters of which dealt with the questions, "Who Plans on College?" and "Who Does Not Go to College?". The following conclusions were drawn from the study: a significantly greater number of females than males terminate their education at the secondary level; 3,214 (31 percent) students out of a total of 10,830 noncontinuing graduates had IQ scores of 110 or better and could have undertaken college-level work; of the 3,214 who could have qualified, 2,147 (67 percent) indicated an interest in further education.

The study also highlighted some of the prominent influences which affect the college-going decision. These included the facts that: (1) 48 percent of those planning to continue their education were children of men who had some postsecondary education; (2) 24 percent were the children of college graduates; (3) only 13 percent of the youth not continuing their education were the children of college graduates; (4) 33 percent of those attending higher education institutions indicated that most of their friends were attending college; (5) of those not attending, only 17 percent said most of their friends would continue their education; (6) impending military service did not affect the decision to continue

education; (7) approximately half of the noncontinuing students reported that 94 percent of the boys' parents and 83 percent of the girls' parents expressed a desire for their children to continue; (8) 23 percent of those students not continuing their education reported that their parents required their financial support; and (9) 1,382 students said they would have continued had financial support been available.

During 1960 a report entitled, The College Plans of High School Seniors, was released by the Division of Research of the New York State Education Department. This report found that an increasing proportion of high school seniors were making and carrying out plans for continuing their education. They found outstanding participation in activities was positively related to a student's plans to continue his education. Those who initially indicated they were college-bound, and subsequently changed their plans, cited insufficient funds and nonacceptance by their first choice college.

(ntinuing to probe postsecondary plans, another study entitled, College Plans of High School Seniors, was published by the State Education Department in 1962. These findings, based on a representative statewide sample, indicated that 70 percent of those graduates planned to undertake higher education with the greatest proportion of the remaining 30 percent seeking employment immediately after graduation.

B. Intrastate Research Studies Outside of New York State

Barber canvassed 763 high ability high school graduates from three high schools in Pennsylvania (1949) to ascertain why students with academic potential failed to enter institutions of higher education. The author made a subjective rating of the reasons offered by combining student responses with other data, e.g., academic record and home environment.

Barber concluded that over 50 percent of the students lacked sufficient motivation and financial resources.

Havinghurst and Rodgers (1957) also tackled the motivational factors influencing the college-going decision through examining scholastic ability, social expectations, individual motivation, financial resources, and propinquity to higher education institutions. The results seem inextricably tied to financial aspects when they conclude that, "Practically all of the superior youth who do not continue their education beyond high school are children of people who have had less than a high school education." These parents had had little contact with higher education and tended to value a job for their young people although a substantial majority were cognizant of the social mobility afforded by a college education. The investigators recommended increased scholarship aid and an awareness of individual skills through advisement and counseling.

C. Statewide Research Studies Outside of New York State

Phearman's study (1947) of Iowa high school graduates examined the characteristics of college attenders and nonattenders. Financial barriers were still a primary deterrent and he drew a direct relationship between the parents' educational level and college enrollment. Phearman also found that college enrollment decreases as the size of the family increases.

Toops in Ohio (1935) also found that the father's occupation correlated highly with college enrollment and that the attitudes of child, parent, and community played an important part in the college decision. His work did not concur with the other studies in the financial realm as he found the financial barrier to be the least important of all the barriers studied.

To probe the question of why talented high school students fail to pursue higher education, the United States Office of Education supported research studies in Wisconsin, Indiana, and Arkansas. The following paragraphs describe the findings of these studies.

In Arkansas, Stroup and Andrew (1959) found that both the place of residence and size of high school affected college attendance. Accordingly, students from large schools in cities and towns attended in greater proportion than rural students and young seniors attended in greater proportion than older seniors. Attendance was linked with students' scores on the ACE Test, and the pursuit of a college preparatory curriculum.

In Wisconsin, Little surveyed 34,151 seniors who graduated in June 1957. He sought to establish the circumstances or conditions which influenced the college-going decision. Little arrived at the following conclusions: (a) the trend toward higher education gained momentum because of the technical demands of the world of work and also the rising educational level of parents, (b) the majority of Wisconsin college-goers are in the upper third of ability levels, and (c) lack of money is a major deterrent.

Wright and Jung (1955) examined the upper 10 percent of Indiana high school graduates and found that 1,011 of 3,479 high ability students did not plan to continue their education. Although girls outnumbered boys two to one in the high ability group, only 64 percent of the girls continued their education as opposed to 85 percent of the boys. The educational level of the parents was highly correlated with the college-going decision. More than half of the students were unaware of any scholarship aid available to them.

Berdie and Hood compared the postsecondary plans of the 1950 and 1961 graduating classes in Minnesota with reference to students' ability, high school rank, future plans, and socioeconomic status. They determined that post high school plans are closely related to ability, socioeconomic class, geographic area, family attitude, and personal values. Over the 11-year period, metropolitan students showed a declining relationship of ability and financial status to college attendance.

In 1960, the University of Pittsburgh issued Project Talent, a monumental study of the American high school student. In part, the study sought to identify the interests, aptitudes, and background factors of students with respect to their lack of interest and motivation for higher education. One of the thought provoking statements was the following observation:

> It may be a little troublesome to some educators to find that as many as 25.4 percent of the boys and 19 percent of the girls who were enrolled in a college-preparatory course in high school did not enter college within a year after they graduated from high school.

They found that college goers tended to enroll in college preparatory curricula and to have higher grades than those not entering a college. College entrants were more likely to have discussed their future plans with school personnel than nonentrants. Parental support was a crucial factor and the occupational status of the parents of the goers was higher than that of the nongoers. Accessibility to higher education institutions reflected a geographic differential in the college-going rate for the Nation's high schools. The greatest chance for college occurred when the ability level of the student and the level of parent education were high.

D. Summary

In conclusion, the scope of studies reviewed has identified certain common variables which have deterred students in their quest for higher education. Parental education seems to be a crucial factor since a linear relationship is found between the child's attendance, social status, and his parent's attendance at an institution of higher education. Some studies show that sex is an inhibitory factor regarding college attendance. Girls of the same ability and achievement as boys are less likely to go. The financial barrier still appears to be a very real one for many students.

III. METHODS AND PROCEDURES

A. The Sample

The first phase of the study was initiated during the 1967-68 school year. One hundred and twelve high schools were selected at random from an alphabetical list of all the public secondary schools in the State. Of these, 101 schools responded to form the sample. The geographical distribution of the schools and students appears in Table 1.

Table 1

Geographical Location of Schools in the Study
and Number of Students Included

Geographical Location	Schools Included		Students Included	
	Number	Percent	Number	Percent
New York City	14	14%	1,339	26%
Big Six Cities (Albany, Buffalo, Rochester, Syracuse, Utica, Yonkers)	12	12	997	19
Four Counties Bordering New York City (Nassau, Suffolk, Westchester, Rockland)	16	16	885	17
Remaining Areas of the State	59	59	1,984	38
TOTAL	101	--	5,175	--

Although only 14 public secondary schools were included from New York City, these schools contributed 1,339 (26 percent) students in the total sample. Seniors from the "Big Six Cities" schools comprised 19 percent of the sample or 997 students, 855 (17 percent) came from schools located in the four counties bordering New York City, and 1,984 (38 percent) were graduating from the secondary schools in the remaining areas of the State. The sample drawn represented 3 percent of the statewide public school enrollment in 12th grade.

When comparisons were made with the statewide picture, it was found that the number of seniors enrolled in the 12th grade in 1967 was 191,902. New York City accounted for 59,702 (31 percent) of the students and the "Big Six Cities" schools totaled 11,864 or 7 percent of the total enrollment.

The four counties bordering New York City reported a senior fall enrollment of 48,824 (25 percent). The remaining areas of the State reported a fall enrollment of 69,902 or 37 percent of all seniors enrolled in the public secondary schools.

The representation achieved in the sample appeared to be comparable for New York City and the remaining areas of the State. However, the distribution over-represented the students from the "Big Six Cities," and under-represented those from the four counties bordering New York City.

An examination of the sample schools according to their enrollment size revealed that 38 schools (38 percent) had enrollments of 1,000 or more, 22 schools (22 percent) had enrollments between 500-999, and 41 (40 percent) schools had enrollments of less than 500.

Further analysis of the sample showed that it was representative in including comprehensive high schools and specialized high schools, a variety of school organizational patterns, a range of students in all socioeconomic classes and of all scholastic abilities, and an equable proportion on the basis of sex.

After the 112 secondary schools were chosen, they were contacted by letter (Appendix A) to determine their willingness to participate in the study. Several schools declined and were subsequently replaced by new schools which met the same criteria as the original selection. Then a packet of materials containing directions for student selection (Appendix B) and the student questionnaire (Appendix C) was mailed to the participating schools. Materials were returned by 101 schools. The 11 schools not returning the materials did not seem to cluster in any one geographic area nor were they of any particular size.

In June 1968, the participating schools selected every third member of their graduating classes for inclusion in the study. Questionnaires were distributed to these students, chosen from alphabetical lists of seniors. To insure confidentiality, students were assigned code numbers and were instructed to seal the questionnaire in an envelope before returning it to the school. Ninety-four percent of the students returned their questionnaires for a total of 5,527 responses. The number of invalid questionnaires was 352, reducing the total population studied to 5,175 students. Questionnaires were defined as invalid if they lacked responses to more than 10 percent of the items or did not contain essential school data, e.g., class rank. Of the total seniors studied 2,729 (53 percent) were males and 2,446 (47 percent) were females.

B. The Instrument

The instrument used in data collection (Appendix C) was developed by members of the Bureau of Research in Higher and Professional Education. It was designed to inquire into the goals of high school seniors and to examine what factors in the school and community tend to inhibit or enhance the decision to attend college.

It was hypothesized that a number of variables interact in the formation of individual goals and it is acknowledged that the particular variables investigated do not exhaust the various influences affecting the college decision. However, the variables defined for this study were: familial economic level, proximity to higher education institutions, scholastic ability, peer values and influence, familial values and influence, impact of the guidance and counseling program in the secondary school, social class, and sex.

Therefore, the student questionnaire elicited information about:

... vocational and educational plans for fall 1968

... location of the secondary school

... academic interests

... amount of interaction with the guidance program

... names of colleges to which the participant applied

... names of colleges which accepted the participant

... reasons for attending or not attending college

... amount and sources of financial support needed

... influence of significant individuals upon plans

... scholastic qualifications

... family structure, occupational levels, and educational levels of family members

... quality and quantity of encouragement received from parents

The instrument was pretested in March 1968, on 247 high school seniors and revisions were made on format, terminology, and content. The final form was administered to the students in June 1968.

IV. PRESENTATION AND ANALYSIS OF DATA

A. Future Plans of High School Seniors

Table 2 summarizes the plans of the 5,175 respondents for fall 1968.

It was found that 67 percent of the June graduates planned to continue their education. This figure includes all types of postsecondary education in both nondegree and degree institutions. A significantly larger proportion of those planning to continue their education were boys (55 percent). A significantly larger proportion of girls than boys planned

Table 2

September 1968 Plans of New York State High School Graduates*

September 1968 Plans	Male Graduates			Female Graduates			Total Graduates	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Continue Education	1,887	69%	55%	1,571	64%	45%	3,458	67%
Obtain Full-Time Employment	329	12	34	624	26	66	953	18
Seek an Apprenticeship	62	2	91	6	Less Than 1	9	68	1
Enlist in the Military Service	231	9	95	11	Less Than 1	5	242	5
Become a Full-Time Homemaker	0	0	0	30	1	100	30	1
Indefinite	116	4	57	87	4	43	203	4
Other Plans	67	3	44	82	1	56	149	3
No Response	37	1	--	35	1	--	72	1
TOTAL	2,729	--	53	2,446	--	47	5,175	--

*Percentages in all tables have been rounded to the nearest whole number.

to obtain full-time employment (66 percent/34 percent), while an equal percentage (4 percent) of both boys and girls felt that their plans for the forthcoming year were still in the formative stages. Only 1 percent of the total graduates planned to seek apprenticeships. Almost one-tenth (9 percent) of the boys planned to enlist in the military service. Very few of the girls (1 percent) expressed plans to become full-time homemakers. When the students were asked whether their plans represented their true wishes, 2,345 males (86 percent) and 2,142 females (88 percent) replied affirmatively. Only 327 males (12 percent) and 252 females (10 percent) replied that their actual plans for September 1968 did not correspond with their true desires. The great majority of those students who indicated dissatisfaction with their actual plans said their true desire would be to continue their education.

B. Types of Institutions and Locations Selected by Students Planning to Continue Their Education

The responses of the 3,458 students indicating they planned to continue their education were examined to determine the type of institution they planned to enter. These results appear in Table 3.

Of the 3,458 students who indicated that they planned to continue their education, the greatest percentage indicated a preference for 2- and 4-year public institutions while the smallest percent selected a 3-year nursing school. A slightly greater proportion (6 percent) of boys than girls planned to attend 4-year private institutions. This was also true in the proportion of boys attending 2-year public colleges. However, the reverse was true when one examines the sex of those going to 2-year private colleges. The dominance of the public sector in higher education

Table 3

Types of Institutions Selected by Those Students Planning to Continue Their Education

Type of Institutions	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
4-Year Private College	546	29%	61%	367	23%	39%	913	26%
4-Year Public College	558	30	55	459	29	45	1,017	29
2-Year Private College	51	3	43	67	4	57	118	4
2-Year Public College	590	31	59	407	26	41	997	29
3-Year Nursing School	2	Less Than 1	4	41	3	96	43	1
Other Type of Higher Education Institution	110	5	35	204	13	65	314	9
No Response	30	2	--	26	2	--	56	2
TOTAL	1,887	--	55	1,571	--	45	3,458	--

becomes readily apparent as one examines the numbers going to public institutions as opposed to private institutions.

When the data for these students were analyzed with regard to the location of these institutions, a significantly greater proportion of students planned to continue their education within the State. These data are shown in Table 4.

Nineteen percent of those students continuing their education indicated plans to attend an out-of-State institution while the vast majority (74 percent) showed a preference for in-State institutions. The remaining 7 percent either did not answer or were still undecided.

C. Admittance to College

Previous studies were undertaken by the New York State Education Department to examine the degree of success high school graduates experienced in seeking admission to an institution of higher education. These studies revealed that, "approximately 9 out of 10 high school graduates were successful." (Bickel, 1968)

The data in Table 5 show the number of college applications submitted by those students planning to continue their education. Slightly under one-fourth (23 percent) of the students submitted only one application to college. It may be that early-decision plans used by some institutions are reducing the number of multiple applications, although comparatively high percentages (19 percent) were still found in the two and three application categories.

A total of 9,616 applications were submitted by the 3,458 students who indicated they planned to continue their education. In June 1968, 4 percent of the group had not yet submitted an application to a college

Table 4

Geographic Location of Colleges Selected by Graduates
Planning to Continue Their Education

Location of College	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Institutions within New York State	1,389	74%	55%	1,173	75%	45%	2,562	74%
Institutions Out-of-State	379	20	56	294	19	44	673	19
Undecided	88	5	67	42	2	33	130	4
No Response	31	1	--	62	4	--	93	3
TOTAL	1,887	--	55	1,571	--	45	3,458	--

Table 5

Number of College Applications Submitted by Those Graduates Planning to Continue Their Education

Number of Applications Submitted	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
0	72	4%	48%	76	5%	52%	148	4%
1	434	23	54	371	24	46	805	23
2	343	18	53	297	19	47	640	19
3	364	19	54	304	19	46	668	19
4	337	18	60	228	15	40	565	17
5	154	8	57	113	7	43	267	8
6	101	6	47	112	7	53	213	6
7	27	1	64	15	1	36	42	1
8 or More	29	2	64	16	1	36	45	1
No Response	26	1	--	39	2	--	65	2
TOTAL	1,887	--	55	1,571	--	45	3,458	--

even though they expressed an intention to enter in September 1968. The average number of applications filed per senior was 2.78, representing a slight increase over a 1960 study made by the New York State Education Department, which reported 2.43. (Cowen, 1960)

As a corollary to the question on the submission of college applications, the students were also asked how many acceptances they received. These data are found in Table 6.

The largest percent (40 percent) of high school graduates received one acceptance from an institution of higher education. Twenty-four percent received two acceptances. The data reported in Table 6 do not reflect whether the accepting institution was the student's first, second, or last choice. They merely indicate that the students were accepted at some institution of higher education.

As of June 1968, 291 (8 percent) of the high school graduates reported not receiving an acceptance from any institution. However, if one deletes the 153 students who failed to file an application, the impact of this number is reduced considerably. The remaining students were characterized by marginal scholastic qualifications, i.e., low class rank and low scores on the Regents Scholarship Examination.

The students were queried regarding the types of institutions to which they had applied. When the students' responses to this question were analyzed, it was found that:

... the majority of the applications were submitted to 4-year units of SUNY (29 percent of all applications)

... a greater percentage of girls submitted applications to these 4-year institutions than did boys. The former nature of these institutions as teacher education schools may still account for these institutions being more attractive for girls

Table 6

Number of College Acceptances Received by Those Graduates Planning to Continue Their Education

Number of Acceptances Received	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
0	165	9%	56%	126	8%	44%	291	8%
1	746	40	55	627	40	45	1,373	40
2	443	23	53	383	24	47	826	24
3	258	14	55	204	13	45	462	13
4	101	5	57	76	5	43	177	5
5	26	1	47	29	2	53	55	2
6	5	Less Than 1	38	8	Less Than 1	62	13	Less Than 1
7	0	0	0	0	0	0	0	0
8 or More	1	Less Than 1	100	0	0	0	1	Less Than 1
No Response	142	8	--	118	8	--	260	8
TOTAL	1,887	--	55	1,571	--	45	3,458	--

... the 2-year institutions of SUNY received 25 percent of the total applications made

... a greater proportion of the applications sent to the 2-year institutions (27 percent) were made by the boys. These institutions tend to emphasize many technical programs which may be more attractive to the boys

It is interesting to note that if a student elected to apply to a private institution he was more likely to select an out-of-State institution. Of the total group, 21 percent applied to private institutions outside New York State while 17 percent applied to private institutions within New York State.

Public institutions outside New York State appeared to have relatively low attraction for those students submitting applications. Only 4 percent of all applications submitted were made to these types of institutions. Boys accounted for 56 percent of the total applications submitted.

The acceptance rate of the various types of institutions is presented in Table 7. The percentages given represent the total number of applications made to the institutions and the total number of acceptances granted by the institutions.

The highest acceptance rate of the institutions was found in the private colleges of New York State. Of the applications submitted to these institutions, 69 percent were subsequently accepted. The lowest acceptance rate was found in the 2- and 4-year units of SUNY. The acceptance rate for female applicants tended to be higher than the rate for male graduates.

When one examines the statistics for individuals, it becomes apparent that the probability of rejection tended to decrease as the number of applications increased. Students who filed the most applications tended

Table 7

Applic tions Accepted by Institutions

Types of Institutions	Percent of Applications Accepted from Males	Percent of Applications Accepted from Females	Total Percent of Applications Accepted
SUNY - Ag. Tech. or Community College	58%	60%	59%
SUNY - 4-year College	57	60	59
Private College in New York State	69	69	69
Business - 3-year Nursing, Beauty, or Art School	64	69	68
Private College - Out-of-State	60	65	62
Public College - Out-of-State	57	65	60
TOTAL	60	63	62

to receive the most acceptances. The greatest probability for rejection occurred for individuals who filed only one application.

An examination of the relationship between a student's class rank and the number of applications he submitted showed:

> ... that 7 percent of all students in the upper quarter of their graduating class fail to apply to any institution of higher education
>
> ... the higher a student's rank in class, the more applications he tends to submit
>
> ... girls in the upper quartile were less likely to go to college than boys in the same quartile

In order to examine the relationship between social class and college attendance, the "Two Factor Index of Social Position" developed by August B. Hollingshead (1966) was used. Hollingshead says this technique:

> . . . was developed to meet the need for an objective, easily applicable procedure to estimate the positions individuals occupy in the status structure of our society. Its development was dependent both upon detailed knowledge of the social structure and procedures social scientists have used to delineate class position . . . . Occupation and education are the two factors utilized to determine social position. (1966)

Hollingshead provides an occupational scale which divides all occupations into seven categories. His rationale for doing this,

> . . . is premised upon the assumption that occupations have different values attached to them by members of our society. The hierarchy ranges from the low evaluation of unskilled physical labor toward the more prestigeful use of skills through the creative talents of ideas and the manipulation of men. (1966)

To use the occupational scale, the following technique was employed:

1. Base a student's occupational score upon the head of household's occupation which appeared in question #57.

2. Multiply the level by a factor weight of 7. The foregoing weight was determined by multiple correlation techniques.

The educational scale is also divided into seven positions. It is "premised upon the assumption that men and women who possess similar educations will tend to have similar tastes and similar attitudes, and they will also tend to exhibit similar behavior patterns." (Hollingshead, 1966)

To use the educational scale, the following technique was employed:

1. Base a student's educational score upon the head of household's educational level which appeared in question #55.

2. Multiply the level by a factor weight of 4. The foregoing weight was determined by multiple correlation techniques.

These two scores, the occupational score, and the educational score, were then added together to yield a composite score. The use of Hollingshead's technique made it possible to categorize the respondents into five social classes. Socioeconomic Class I is the highest, and Socioeconomic Class V is the lowest.

The familiar relationship between social class and college interest has also been demonstrated in this study. It was found that the higher a student's socioeconomic class, the greater was the probability that he would file a college application. Ninety-four percent of the total students in the first socioeconomic class applied to an institution of higher education, while 63 percent in Socioeconomic Class IV, and 52 percent of Socioeconomic Class V submitted applications. Unfortunately

previous studies in New York State either used different instruments to determine socioeconomic class or omitted the variable from the study, so that it is impossible to make comparisons as to whether the percentage of students applying in the lower socioeconomic classes is increasing, decreasing, or remaining stable.

D. Vocational Goal Preference

The students planning to continue their education were asked to indicate the field of study which they intended to pursue. The results of the students' responses are found in Table 8.

Most of the respondents indicated fairly traditional vocational goals. The males in the study tended to show a preference for engineering, science, and business pursuits. The females showed an equal preference for business, a high degree of interest in teaching, and a moderate interest in nursing. The overall responses revealed a low degree of interest in mathematics, the humanities, and social sciences. However, 10 percent of the total graduates were undecided about their field of study and 20 percent exhibited preferences not described in the foregoing list.

E. Scholastic Ability of Graduates

Several measurements of the scholastic ability of the graduates were obtained by using their class rank, Regents Scholarship and College Qualification Test, and the Scholastic Aptitude Tests scores. In some instances not all these measures were available for every student.

Table 8

Vocational Preferences of Graduates Planning to Continue Their Education

Field of Study	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Agriculture	30	1%	73%	11	1%	27%	41	1%
Business	321	17	55	268	17	45	589	17
Engineering	272	14	98	4	Less Than 1	2	276	8
Science	236	13	73	87	6	27	323	10
Nursing	3	Less Than 1	2	122	8	98	125	4
Mathematics	62	3	53	54	3	47	116	3
Humanities	80	4	45	95	6	55	175	5
Teacher Education	186	10	33	378	24	67	564	16
Social Science	89	5	54	75	5	46	164	5
Undecided	183	10	53	163	10	47	346	10
Other	410	22	58	296	19	42	706	20
No Response	15	1	--	18	1	--	33	1
TOTAL	1,887	--	55	1,571	--	45	3,458	--

The class rankings for all the students participating in the study can be found in Table 9.

The overall class rankings produced an adequate range of abilities. Many of the schools did not provide class rankings for the participants, resulting in a "no response" category of 17 percent. The sample included female graduates with higher class rankings than their male counterparts. Since the participants were selected randomly, this again illustrates that girls tend to be better achievers than boys on the high school level.

When comparisons were made between the scholastic rankings of all high school graduates and those planning to continue their education, the following observations were made:

... of those students in the top quartile, 87 percent planned to continue their education

... 70 percent in the second quartile planned to seek further education

... 59 percent in the third quartile planned to continue their education

... 41 percent in the lowest quartile planned to continue their education

... girls were less likely to plan to continue their education than were boys from the same quartile

The school administrators also furnished the participants' Regents Scholarship and College Qualification Test scores. The reported scores were subsequently divided into eight groups. The range of scores which fell within each group can be found in Table 10. Statewide the mean RSCQT total score for the June 1968 graduates was 146.80, with a standard deviation of 52.92.

Table 9

Class Rankings for New York State High School Graduates

Class Rank	Male Graduates			Female Graduates			Total Graduates	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Upper 25%	542	20%	43%	744	30%	57%	1,286	25%
50-74%	518	19	46	623	25	54	1,141	22
25-49%	554	20	54	472	19	46	1,026	20
Lower 25%	506	19	62	318	13	38	824	16
No Response	609	22	--	289	13	--	898	17
TOTAL	2,729	--	53	2,446	--	47	5,175	--

Table 10

RSCQT Scores of Graduates Planning to Continue Their Education

RSCQT Score Intervals	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
0-85	110	6%	52%	98	6%	48%	208	6%
86-105	153	8	51	144	9	49	297	9
106-123	170	9	54	144	9	46	314	9
124-142	196	10	53	172	11	47	368	10
143-161	185	10	50	181	12	50	366	11
162-183	200	11	52	188	12	48	388	11
184-210	254	13	57	190	12	43	444	13
211-300	282	15	60	189	12	40	471	14
No Response	337	18	--	265	17	--	602	17
TOTAL	1,887	--	55	1,571	--	45	3,458	--

Fourteen percent of the graduates scored between 211-300 on the RSCQT, which is the top interval on the RSCQT. As one examines the top intervals, a higher proportion of boys do better than girls. This is noteworthy in view of the girls having higher high school rankings.

The graph (Figure 1) illustrates the relationship observed between a student's rank in class and his score on the RSCQT. It was found that the higher the student's rank in class the greater was the probability that he would achieve a high score on the Regents Scholarship and College Qualification Test. Fifty-eight percent of the students in the upper quartile of their graduating class scored in the upper fourth on the RSCQT while only 15 percent of those in the upper half made a comparable score and 6 percent of those students in the lower half of their class achieved this score. In contrast, of those students who ranked in the lower quartile, only 3 percent had scores in the upper fourth of the RSCQT, while 10 percent of those in the upper half received a comparable score and 58 percent from the lower fourth scored in the lowest quartile of the RSCQT. The performance differences by class rank for all students taking the RSCQT are presented in Table 11.

Table 11

Performance Differences by Class Rank on RSCQT

RSCQT Scores	Q_1 Class Rank	Q_2 Class Rank	Q_3 Class Rank	Q_4 Class Rank
Upper 1/4	58%	15%	6%	3%
Upper 1/2	23	33	[illegible]	10
Lower 1/2	12	29	37	29
Lower 1/4	7	23	[illegible]	58
TOTAL	100	[illegible]0		100

Figure 1
Relationship Between Class Rank and RSCQT Score

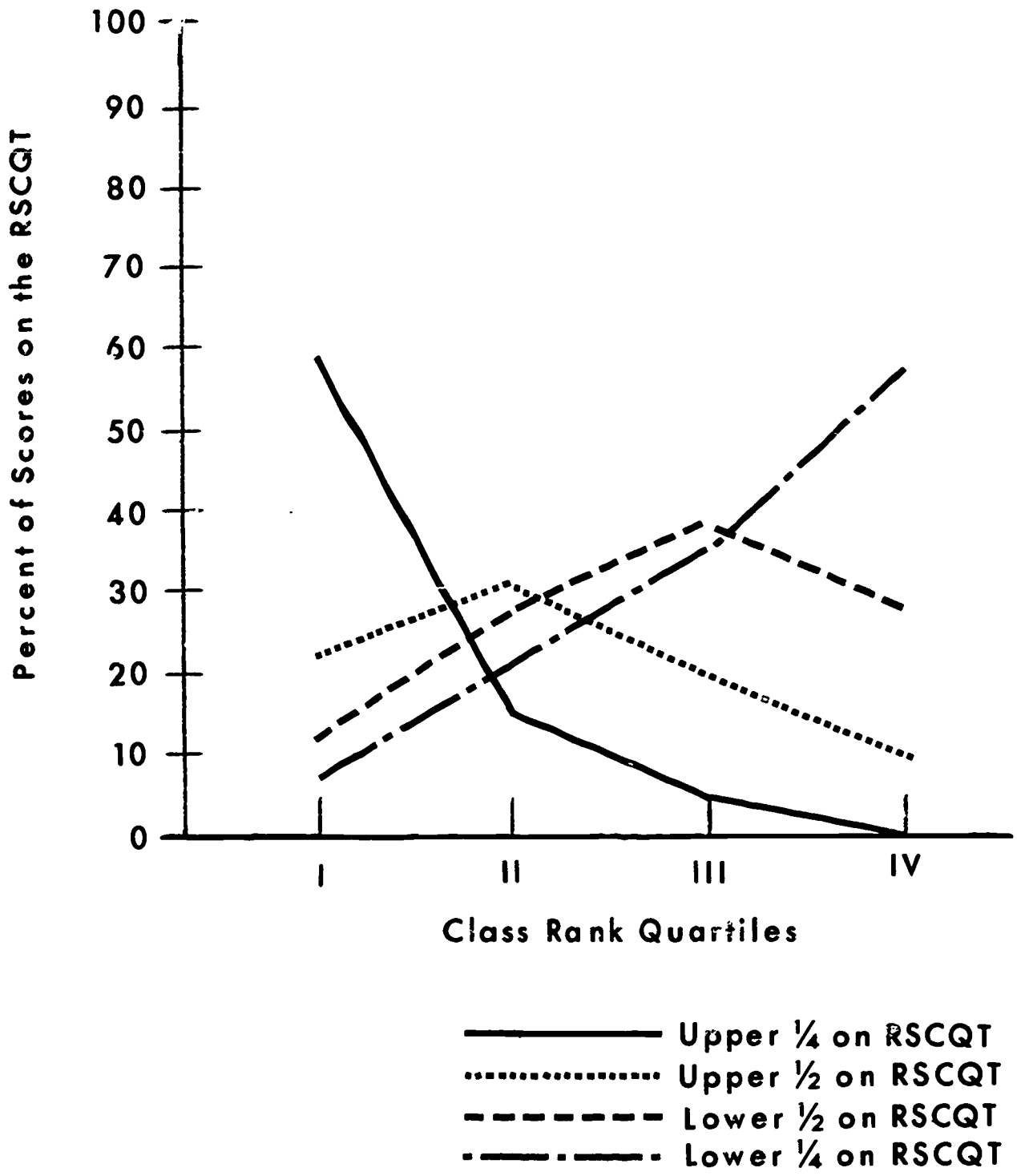


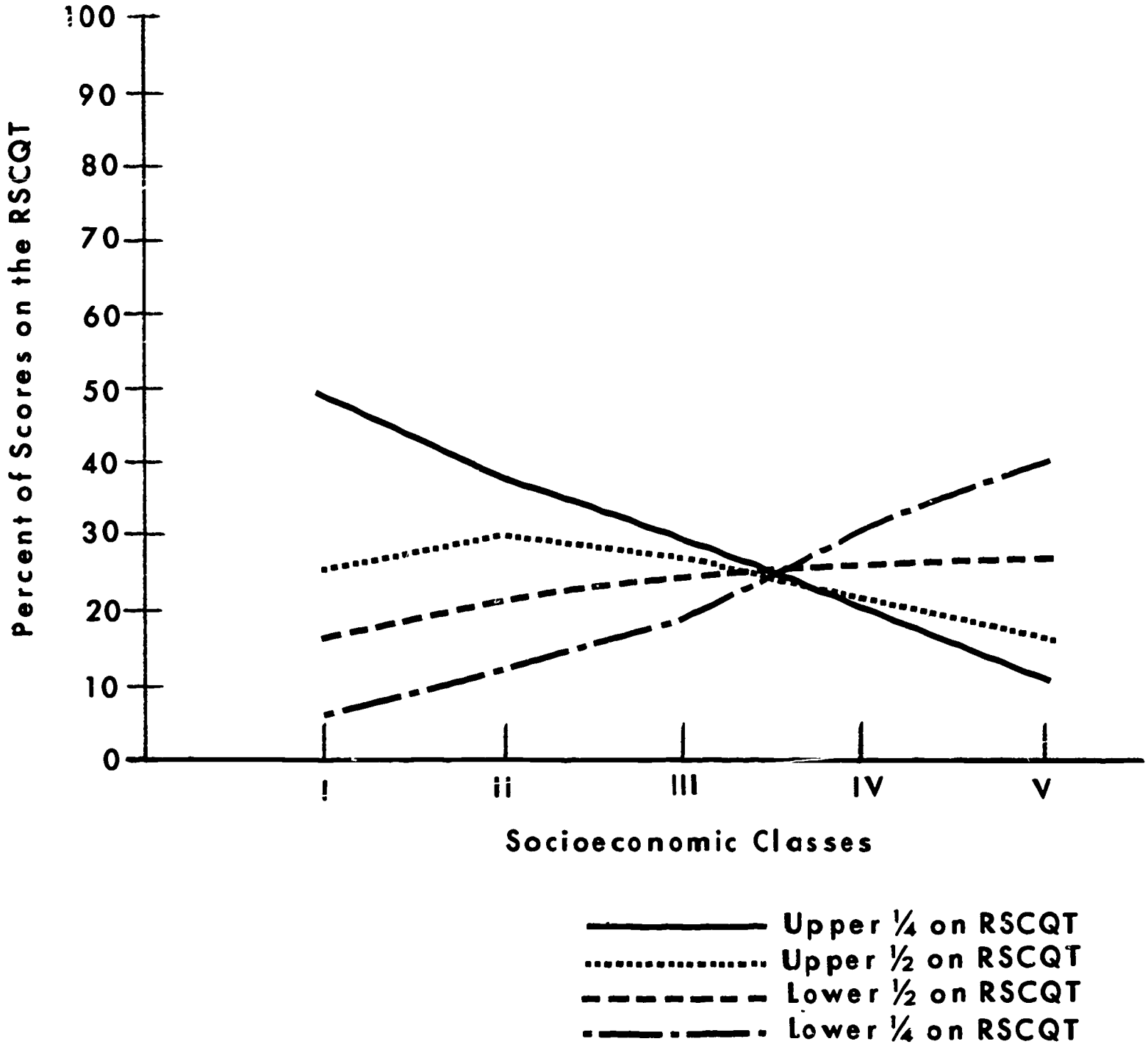
Figure 2 diagrams the relationship between a student's socioeconomic class and his score on the RSCQT. The highest socioeconomic class had the largest percent of students receiving the highest scores on the RSCQT. The results showed that 50 percent of the students from the first socioeconomic class scored in the top fourth on the RSCQT, 26 percent of the same socioeconomic class had scores in the top half, 17 percent were in the lower half while 7 percent were in the lower quarter. A similar comparison of the results for the students in the lowest socioeconomic class reveals that only 13 percent had RSCQT scores in the top quarter, 18 percent from the fifth class were in the upper half, 27 percent in the lower half and 42 percent received RSCQT scores in the lowest quarter. Table 12 illustrates the performance difference by socioeconomic class on the Regents Scholarship and College Qualification Test.

Table 12

Performance Differences by Socioeconomic Class on RSCQT

RSCQT Scores	SES I	SES II	SES III	SES IV	SES V
Upper 1/4	50%	37%	31%	21%	13%
Upper 1/2	26	30	27	23	18
Lower 1/2	17	22	25	26	27
Lower 1/4	7	12	17	30	42
TOTAL	100	100	100	100	100

Figure 2
Relationship Between Socioeconomic Class and RSCQT Score



The students were asked if they had taken the Scholastic Aptitude Tests published by the College Entrance Examination Board. If an affirmative reply was received, the students were asked to report both their verbal and math scores. A total of 2,551 graduates reported their scores on the verbal section. The range of scores for those responding is reported in Table 13.

The median score range for the male and female students was identical. The exact proportions by sex are shown in parenthesis in Table 13. The median score range for all graduates was 500-549. A recent bulletin published by the College Entrance Board reported scores on the SAT (Verbal) for all students taking the SAT between May 1967, and March 1968. The national results for 488,793 boys showed a mean verbal score of 463. A population of 398,672 girls taking the test attained a mean verbal score of 464. These results tend to substantiate the findings of this study, that sex did not seem to be a significant variable in verbal attainment on the SAT.

The students were also asked to report their math scores on the SAT. These are reported in Table 14.

The median score range for the male students on the math section of the SAT was 550-599 and the range for the females was 500-549. Sex did appear to be operating as a variable on the math section of the SAT, and can be seen as one examines Table 14. The boys tended to receive higher scores than the girls. This finding was also evident in the national results on the SAT for students taking it between May 1967, and March 1968. A mean score of 510 was received by the boys, while the mean math score attained by the girls was 466.

Table 13

SAT Verbal Scores Reported by New York State
High School Graduates

Range of SAT Verbal Scores	Male Graduates			Female Graduates			Total Graduates	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
200-299	34	2%	68%	16	1%	32%	50	1%
300-349	60	4	64	33	3	36	93	4
350-399	159	11	58	112	10	42	271	11
400-449	189	13	58	134	12	42	323	12
450-499	289	20	58	207	18	42	496	19
500-549	229	16	51	218	19	49	447	18
550-599	201	14	55	167	15	45	368	14
600-649	106	8	48	112	10	52	218	9
650-699	95	7	55	76	7	45	171	7
700-749	47	4	52	43	4	48	90	4
750-800	13	1	54	11	1	46	24	Less Than 1
TOTAL	1,422	--	56	1,129	--	44	2,551	--

Table 14

SAT Math Scores Reported by New York State
High School Graduates

Range of SAT Math Scores	Male Graduates			Female Graduates			Total Graduates	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
200-299	21	1%	56%	16	1%	44%	37	1%
300-349	47	3	54	40	3	46	87	3
350-399	88	6	50	88	8	50	176	7
400-449	120	8	48	129	12	52	249	10
450-499	197	14	51	185	16	49	382	15
500-549	227	16	50	228	20	50	455	18
550-599	261	18	56	200	18	44	461	18
600-649	197	14	67	97	9	33	294	12
650-699	141	10	61	90	8	39	231	9
700-749	73	5	63	42	4	37	115	5
750-800	43	3	82	9	1	18	52	2
TOTAL	1,415	--	56	1,124	--	44	2,539	--

F. Impact of Guidance and Counseling in the Secondary School

In order to examine the role played by guidance counselors in the decision-making process, the students were asked to respond to several questions directed at existing guidance practices in the students' high schools. Since frequency of contact is one method of examining the scope of the guidance program, students were asked how many individual counseling sessions they had during their senior year. The results for those students planning to continue their education are presented in Table 15.

The mean number of individual counseling sessions reported by the male graduates planning to continue their education was 3.36 sessions. The mean number of sessions for the female graduates was 3.22.

The results for those students not continuing their education are presented in Table 16.

The mean number of individual counseling sessions reported by the male students not planning to continue their education was 2.68 while the mean for the female students was 2.41. In order to examine the hypothesis that guidance counselors spend more time with college bound students than they do with those who plan to terminate their education, mean scores and standard deviations were computed for both groups and subjected to the t-test. The t-value obtained for the male students was 8.64* and the t-value obtained for the female students was 10.49.*

The t-values obtained showed that guidance counselors did spend significantly more time in individual counseling with the college bound students than they did with the noncollege bound students.

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*Significant $P < .001$

Table 15

Individual Counseling Sessions for Those Students
Planning to Continue Their Education

Number of Sessions	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
None	143	8%	55%	118	8%	45%	261	8%
1	194	10	49	202	13	51	396	11
2	319	17	54	279	18	46	598	17
3	361	19	55	302	19	45	663	19
4	267	14	55	218	14	45	485	14
5	198	11	54	171	11	46	369	11
6 or More	384	20	58	274	17	42	658	19
No Response	21	1	--	7	Less Than 1	--	28	1
TOTAL	1,887	--	55	1,571	--	45	3,458	--

Table 16

Individual Counseling Sessions for Those Students
Not Continuing Their Education

Number of Sessions	Male Noncollege Bound Students			Female Noncollege Bound Students			Total Noncollege Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
None	124	15%	47%	139	16%	53%	263	15%
1	136	16	47	155	18	53	291	17
2	161	19	46	188	22	54	349	20
3	137	16	45	164	19	55	301	18
4	116	14	52	105	12	48	221	13
5	58	8	52	53	6	48	111	7
6 or More	101	12	60	65	7	40	166	10
No Response	9	1	--	6	1	--	15	1
TOTAL	842	--	49	875	--	51	1,717	--

Many guidance counselors supplement the individual counseling given to students by providing group guidance sessions. Therefore, the students were asked to report the number of group guidance sessions which they attended during their senior year. The results for those students planning to continue their education are presented in Table 17.

The mean number of group guidance sessions reported by the male graduates planning to continue their education was 1.60 sessions. The mean number of sessions for the female graduates was 1.25 sessions.

The results for those students not continuing their education are presented in Table 18.

The mean number of group guidance sessions reported by the male students not continuing their education was 1.59, while the mean for female students was 1.21. The t-test was used to test the significance of the differences between the means. The resulting t-values were non-significant, showing that the counselors did not spend significantly more time in group guidance with the college bound students than they did with the noncollege bound students. However, the infrequency with which group guidance was used as a technique tends to lessen the force of the apparent contradiction.

Table 17

Group Guidance Sessions for Those Students Planning to Continue Their Education

Number of Sessions	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
None	714	38%	50%	704	45%	50%	1,418	41%
1	300	16	49	312	20	51	612	18
2	360	19	60	245	15	40	605	17
3	246	13	64	139	9	36	385	11
4	87	5	58	62	4	42	149	4
5	39	2	54	32	2	46	71	2
6 or More	111	6	68	51	3	32	162	5
No Response	30	1	--	26	2	--	56	2
TOTAL	1,887	--	55	1,571	--	45	3,458	--

Table 18

Group Guidance Sessions for Those Students Not Planning to Continue Their Education

Number of Sessions	Male Noncollege Bound Students			Female Noncollege Bound Students			Total Noncollege Bound	
	Number	Percent of Total Male	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
None	327	39%	44%	423	48%	56%	750	44%
1	140	17	50	142	16	50	282	16
2	142	17	54	122	14	46	264	15
3	103	12	54	88	10	46	191	11
4	50	6	51	47	5	49	97	5
5	24	3	54	20	3	46	44	3
6 or More	45	5	72	17	2	28	62	3
No Response	11	1	--	16	2	--	27	2
TOTAL	842	--	49	875	--	51	1,717	--

G. Impact of Significant Persons

In an attempt to delineate the prominent influences of significant individuals upon the plans of the high school graduates, the respondents were asked to rank order the influence of parents, siblings, relatives, adults, teachers, counselors, clergy, and peers. The results of these rankings appear in Table 19, for those students continuing their education. A rank of 1 denotes the greatest influence, whereas, 8 is the least influence.

Table 19

Degree of Influence of Significant Persons Upon the Plans of Graduates Continuing Their Education

Significant Persons	Male Graduates	Female Graduates
Parents	1	1
Siblings	5	3
Close Relatives	7	7
Adult Friends	4	6
Teachers	3	4
Guidance Counselors	2	5
Clergymen	8	8
Peers	6	2

When the differences between the rankings of the male graduates and the female graduates were compared, it was found that parents exerted the greatest influence upon the plans of students, while clergymen had the least influence. The boys studied placed the guidance counselors second in influence while the girls ranked the counselors fifth in importance. Teachers apparently exerted a moderate degree of influence, being rated third by the boys and fourth by the girls. Adult friends exerted more influence upon boys, as they ranked them fourth, while girls placed them sixth in relative influence. The boys placed a low priority upon the influence of siblings, ranking them fifth, while the girls ranked them third. Contrary to our expectations, peers exerted very little influence upon the boys (a rank of 6), while the girls ranked peers second in their hierarchy. Relatives were ranked seventh by both groups.

In general, the boys who were planning to continue their education were more influenced by significant adults, i.e., parents, counselors, and teachers, while the girls, except for their parents, tended to be influenced more by people their own age, i.e., classmates, and siblings. This may be an early indication of the seriousness with which males view their career and the lighter attitude exhibited toward career plans by the females.

When the same analyses were applied to those students not continuing their education, it was found that different people were influential for this group of students. Table 20 illustrates these results.

Table 20

Degree of Influence of Significant Persons
Upon the Plans of Graduates Not Continuing Their Education

Significant Persons	Male Graduates	Female Graduates
Parents	1	1
Siblings	2	2
Close Relatives	4	4
Adult Friends	3	5
Teachers	7	6
Guidance Counselors	6	7
Clergymen	8	8
Peers	5	3

When the differences between the rankings of the boy graduates who were not continuing their education, and the girl graduates were compared, it was found that parents exerted the greatest influence and that the clergy had the least influence. These results were identical for those continuing their education. Both the boys and girls marked siblings as second in the degree of their influence. Adult friends apparently exerted more influence upon the boys (third) than upon the girls (fifth). Both groups assigned a moderate degree of influence to relatives, ranking them fourth. The boys placed relatively low priority upon the influence

of peers by ranking them fifth, while the females ranked them third. Guidance counselors appeared to have little influence upon either the boys or the girls, being ranked sixth and seventh respectively. The same was true of teachers, who were ranked seventh by the boys and sixth by the girls. A lack of identification with school personnel is evident by the low degree of influence which they exert upon the noncollege bound students.

In general, the boys and girls not planning to continue their education showed considerable similarity in selecting significant person(s). They sought counsel outside of the school establishment.

If we compare the rankings of the college bound and the noncollege bound, we notice that in both groups parents exert the dominant influence. The family circle, i.e., siblings and other relatives, was of considerable influence in the decision-making process for the students not continuing their education, and of only negligible influence on the other group of students. The college bound were influenced to a greater degree by school personnel than the students planning to terminate their educacion.

H. Financing a College Education

A variety of studies have been undertaken to explore the financial barriers to higher education. New York State has developed a comprehensive program of financial aid designed to serve both undergraduates and graduates. However, it is evident that certain segments of the program do not adequately meet the needs of our students. Thus, some of the questions included in the questionnaire attempted to examine the impact of the current forms of financial aid upon the students' plans.

The students were asked to indicate the willingness of their parents to pay for their children's education. The response by those

planning to continue their education revealed that 90 percent of all students in this group indicated that their parents were willing to assist in the financing. Nine percent said that they could not depend upon their parents for financial assistance. Other studies have shown that parents are somewhat more reluctant to finance further education for their daughters than they are for their sons, and that fact appeared to be also true in this instance.

After the willingness of parents to offer financial support was examined, students were asked to respond to the question of what proportion of expenses their parents could afford to pay. The results of these responses are presented in Table 21.

Slightly more than one-third (36 percent) of the group indicated that their parents could pay their total college expenses. Thirty percent indicated that their parents could contribute 50 percent of the total, while 10 percent felt that they could not count on any support from their parents. Sixty percent of the total group studied will need some form of financial assistance during their first year of higher education.

An examination of the characteristics of the individuals in the 60 percent requiring financial assistance revealed that 26 percent were in the top fourth of their graduating class, 26 percent were in the top half, 25 percent were in the lower half, and 23 percent were in the bottom quarter. One wonders about the probability of the latter two groups receiving aid to further their education. Financial requirements did not appear to be related to achievement, since the need appeared on all achievement levels in almost equal proportions.

When the RSCQT scores of the group needing financial assistance were analyzed, it was found that 15 percent of those scoring between 211

Table 21

Parents' Contributions Towards College Expenses

Percentage of Expenses Which Parents Can Contribute	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
100%	653	35%	53%	592	38%	47%	1,245	36%
50%	564	30	55	471	30	45	1,035	30
25%	407	22	59	289	18	41	696	20
0%	196	10	56	153	10	44	349	10
No Response	67	3	--	66	4	--	133	4
TOTAL	1,887	--	55	1,571	--	45	3,458	--

and 300 would need financial aid. Thirty-two percent of the group, however, were unlikely to receive aid from New York State funds, because their scores fell below the minimum score required for a scholar incentive award. Of the students achieving above the statewide mean of 146.80 (June 1968), 41 percent will require varying amounts of financial assistance and at least part of their support will come from State funds.

Assuming that parents will still be called upon to make the major financial contribution towards students' expenses, the students were asked about the willingness of their parents to borrow money for this purpose. The findings appear in Table 22.

Again there appeared little variability between the responses of the boys and girls. Fifty-nine percent of all graduates felt their parents were willing to borrow money for their college education. Only 12 percent saw reluctance on the part of their parents. However, slightly more than one-fourth (26 percent) were unaware of their parents' predisposition in this matter. It seems apparent that some parents have been remiss in frankly discussing the financial aspects of college with their children.

In addition to examining the students' perceptions of their parents' roles in financing a college education, a series of questions was posed to examine the students' plans to contribute to their own education. Table 23 presents the results of a question related to the students' willingness to borrow money.

More boys were willing to borrow for their education than were girls (56 percent/44 percent). A total of 63 percent displayed a willingness to borrow for their education while 16 percent of the group would not. The remaining 21 percent were either undecided or did not respond. These groups may have lacked sufficient exposure to various programs of financial assistance.

Table 22

Willingness of Parents to Borrow for College Expenses

Parents Willing	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Yes	1,126	60%	56%	900	57%	44%	2,026	59%
No	221	12	52	205	13	48	426	12
Don't Know	487	26	55	397	25	45	884	26
No Response	53	2	--	69	5	--	122	3
TOTAL	1,887	--	55	1,571	--	45	3,458	--

Table 23

Willingness of Students to Borrow for College Expenses

Students Willing	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Yes	1,211	65%	56%	964	61%	44%	2,175	63%
No	290	15	52	272	17	48	562	16
Undecided	337	18	55	279	18	45	616	18
No Response	49	2	--	56	4	--	105	3
TOTAL	1,887	--	55	1,571	--	45	3,458	--

In 1946, Philip A. Cowen published, A Study of Factors Related to Attendance in New York State, which examined the thesis ". . . that youth in all parts of the State should attend college to about the same extent." The report yielded information relevant to attendance as it related to the proximity of higher education institutions, and the impact of economic, social, and local school factors. He found that, "the presence of a college in a community seems to about double the percentage of youth who attend college from the local area."

In 1955, the New York State Education Department issued the booklet, Crucial Questions About Higher Education, the second and third chapters of which dealt with the questions, "Who Plans on College?" and "Who Does Not Go to College?". The following conclusions were drawn from the study: a significantly greater number of females than males terminate their education at the secondary level; 3,214 (31 percent) students out of a total of 10,830 noncontinuing graduates had IQ scores of 110 or better and could have undertaken college-level work; of the 3,214 who could have qualified, 2,147 (67 percent) indicated an interest in further education.

The study also highlighted some of the prominent influences which affect the college-going decision. These included the facts that: (1) 48 percent of those planning to continue their education were children of men who had some postsecondary education; (2) 24 percent were the children of college graduates; (3) only 13 percent of the youth not continuing their education were the children of college graduates; (4) 33 percent of those attending higher education institutions indicated that most of their friends were attending college; (5) of those not attending, only 17 percent said most of their friends would continue their education; (6) impending military service did not affect the decision to continue

It would appear that, despite the number and variety of financial resources available, both students and parents still show some reluctance to "mortgage" their futures for education. Other methods of financing a college education were explored with the students, e.g., part-time work and summer employment. Table 24 shows the responses of the students when asked whether they would seek part-time employment. The answers are reported in Table 24 for those students who planned to continue their education.

A significantly* higher proportion of boys than girls displayed a willingness to work part-time in order to finance their education. Sixty-three percent of those responding affirmatively were boys. Almost one-fourth of the group (21 percent) was still undecided about whether to use a part-time job to supplement college expenses. Thirty-six percent do not plan to work, which corresponds with the same proportion of students who said that their parents could contribute 100 percent of their expenses.

The other method explored was that of summer employment, which could either supplement or replace part-time work during the school year. Table 25 gives the responses of the students when they were asked if they planned to seek summer employment as a method of meeting their college expenses.

A high proportion (84 percent) of the students viewed summer employment as a desirable way of meeting their college expenses. It was twice as desirable as part-time work. The girls planning to seek summer employment totaled 82 percent of all those continuing their education, while 86 percent of the boys also planned summer work. Since the questionnaire was administered before the summer began, it was not possible to determine how

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*Significant $P < .01$

Table 24

Willingness of Students to Work Part-Time While They Are in College

Students Willing	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Yes	891	47%	63%	532	34%	37%	1,423	41%
No	569	30	47	653	42	53	1,222	36
Undecided	398	21	55	329	21	45	727	21
No Response	29	2	--	57	3	--	86	2
TOTAL	1,887	--	55	1,571	--	45	3,458	--

Table 25

College Bound Students Seeking Summer Employment

Students Seeking Summer Jobs	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
Yes	1,619	86%	56%	1,283	82%	44%	2,902	84%
No	134	7	53	118	7	47	252	7
Undecided	103	5	47	113	7	53	216	6
No Response	30	2	--	57	4	--	87	3
TOTAL	1,887	--	55	1,571	--	45	3,458	--

successful these students were in actually obtaining employment, nor was it possible to measure the effect of employment or unemployment upon their fall plans.

If we examine the group which did not plan to continue their education and the impact of the lack of financial resources upon the plans of this group, we find that only 4 percent of those not planning to continue their education cite the lack of money or the need to help support their family as reasons for not seeking further education. There appear to be other barriers rather than the financial one operating to reduce one's interest in higher education. However, the financial problem seems to lie within the group who have already made the decision to continue their education and later may be a cause of attrition. The fact that a majority of students seek ways in which to supplement their financial resources would certainly seem to indicate that the financial barrier is still present, but it appears within the structure of the college bound population and does not actually affect the "go" or "no go" decision.

I. Proximity to Institutions of Higher Education

An earlier study by Cowen (1946) revealed that proximity to an institution of higher education was a factor in increasing the percent of youth continuing their education. In order to examine the current impact of this finding, several questions were posed relating to a student's proximity to a college and his decision to seek further education. Table 26 relates the responses according to the students' plans for the forthcoming year.

Fifteen percent of the students studied reported they lived within 25 miles of a 2-year college; 56 percent of them were college bound and 44 percent had decided not to continue their education. Comparisons with past

Table 26

Proximity of Students to Higher Education Institutions*

Type of Institution Within 25 Miles	College Bound Students			Noncollege Bound Students			Total Graduates	
	Number	Percent of Total College Bound	Percent of Total Graduates	Number	Percent of Total Noncollege Bound	Percent of Total Graduates	Number	Percent of Total
2-Year College	438	11%	56%	342	20%	44%	780	15%
4-Year College	223	7	65	120	7	35	343	7
Both a 2-Year and 4-Year College	2,577	75	75	891	52	25	3,468	67
Neither Type	88	3	62	55	3	38	143	3
Don't Know	85	3	25	249	15	75	334	6
No Response	47	1	--	60	3	--	107	2
TOTAL	3,458	--	67	1,717	--	33	5,175	--

*These students did not necessarily plan to enter these institutions.

college-going rates over the last few years make this about average for New York State. Availability of a 4-year institution within a 25 mile radius increased the college-going rate to 65 percent for the 7 percent of the total population in this category. The great majority (67 percent) of students reported that there were both 2- and 4-year institutions within commuting distance of their homes. Apparently the diversity of higher education institutions resulted in an increased college-going rate, as it soared to 75 percent. The placement of higher education institutions throughout the State has apparently been judicious, since only 3 percent of the population studied said they were not within 25 miles of either a 2- or a 4-year institution. This apparently had little effect, since the going rate was still 62 percent. Six percent were totally unaware of whether or not they were close to a college or university. As one might anticipate, the largest proportion unaware of college proximity were those students not continuing their education (75 percent). There was a significant difference for the college-going rate when either a 4-year college or both a 2- and 4-year institution were within 25 miles. The proximity of 2-year schools did not materially affect the college-going rate.

The responses of the noncollege bound population to a question relating to their desire to attend if a college were within commuting distance showed that 23 percent of this group would be interested. Forty-six percent of the group replied negatively and 31 percent were uncertain whether the presence of such an institution would affect their decision.

J. Familial Values and Influences

A number of questions were posed in order to ascertain the influence of the family on the individual. In a previous section, the overall impact of significant persons upon an individual's plans was examined. It was determined that the parents were the most influential force for all groups of students. To substantiate further the impact of parental influence, the graduates were asked to what degree their parents influenced their plans. The actual responses for both the college bound and noncollege bound populations appear in Table 27.

As can be seen from the aforementioned table, about one-half of the students feel that their parents exerted considerable influence on their plans (25 percent and 24 percent in the first two categories). However, if one examines the responses for both groups, it becomes readily apparent that the college bound students feel significantly more parental influence than the noncollege bound students. This becomes more and more apparent as one examines the decreasing scale of influence. Only 2 percent of the college bound students felt no parental influence, while 12 percent of the noncollege bound felt this way. Apparently from these results and the answers to the earlier question which examined the amount of influence exerted by school personnel, these noncollege bound students are relatively free from adult influence, while the college bound are not.

As a corollary to this question, students were also asked to report how frequently they discussed their future plans with their parents. These results appear in Table 28.

Frequent communication between parents and students was reported for 43 percent of the students. However, it became evident that the

Table 27

Parental Influence and Student Plans

Degree of Parental Influence	College Bound Students			Noncollege Bound Students			Total Graduates	
	Number	Percent of Total College Bound	Percent of Total Graduates	Number	Percent of Total Noncollege Bound	Percent of Total Graduates	Number	Percent of Total
Very Great	1,042	30%	80%	251	15%	20%	1,293	25%
Very Much	964	28	68	260	15	32	1,224	24
To Some Extent	1,056	31	62	665	38	38	1,721	33
Very Little	257	7	47	289	17	53	546	10
Not At All	77	2	27	209	12	73	286	6
No Response	62	1	--	43	3	--	105	2
TOTAL	3,458	--	67	1,717	--	33	5,175	--

Table 28

Occurrence of Parent-Student Discussions on Plans

Occurrence of Discussions	College Bound Students			Noncollege Bound Students			Total Graduates	
	Number	Percent of Total College Bound	Percent of Total Graduates	Number	Percent of Total Noncollege Bound	Percent of Total Graduates	Number	Percent of Total
Frequent	1,634	48%	74%	566	33%	26%	2,200	43%
Quite Often	1,188	35	67	596	35	33	1,784	34
Seldom	563	16	55	461	27	45	1,024	20
Never	26	Less Than 1	28	64	4	72	90	2
No Response	47	1	--	30	1	--	77	1
TOTAL	3,458	--	67	1,717	--	33	5,175	--

college bound have a significantly greater degree of communication with their families than those not continuing their education. This was true in all instances. Although earlier questions established that for both groups parents exerted the dominant influence upon future plans, the amount of open discussion regarding an individual's plans will vary for the two groups. Since the noncollege bound students do not appear to have much free discussion with either school personnel or their parents, one wonders what other individuals or forces play key roles in the determination of their future.

The interest shown by parents towards the individual's school work was also examined. Table 29 gives the responses of both the college bound and noncollege bound students.

An overwhelming proportion of students (85 percent) reported that their parents displayed consistent interest in the quality and progress of their work in school. Only a small proportion of students (5 percent) reported a lack of parental interest in their work, while 9 percent felt that their parents were periodically interested. However, the major patterns of encouragment, or the lack of it, appear when the responses of the college bound students are contrasted with those who are not headed toward college. Although 85 percent of the students felt there was consistent support from their parents, 68 percent of this group were college bound and 32 percent were not college bound. There was no significant difference between the negative responses for both groups, but those receiving at least periodic interest favored the college bound student again (60 percent vs. 40 percent). Generally, the students who plan to continue their education have also received greater parental attention in their school work.

Table 29

Parental Interest in Student's School Progress

Parental Interest	College Bound Students			Noncollege Bound Students			Total Graduates	
	Number	Percent of Total College Bound	Percent of Total Graduates	Number	Percent of Total Noncollege Bound	Percent of Total Graduates	Number	Percent of Total
Shown Consistent Interest	3,022	87%	68%	1,383	81%	32%	4,405	85%
Not Shown Interest	112	3	50	112	7	50	224	5
Shown Irregular Interest	276	8	60	185	11	40	461	9
No Response	48	2	--	37	1	--	85	1
TOTAL	3,458	--	67	1,717	--	33	5,175	--

It would seem reasonable to assume that if parents do display regular interest in their children's school work, then they would also actively encourage their children to continue their education. Of the 4,405 students who reported that their parents showed consistent interest, 3,828 (87 percent) also said their parents actively encouraged them to continue their education. Of the 224 who reported no parental interest shown, 95 (42 percent) still maintained that their parents actively encouraged them to continue. The 461 receiving intermittent parental reinforcement reported that 295 (64 percent) had active encouragement to continue their education. A linear relationship between encouragement in their past educational experiences and their future was found to exist.

Most of the total family impact for an only child would be attributed to the parents and possibly close relatives. Out of the total population studied, 403 were only children and of those 70 percent planned to seek higher education. Of the 4,772 who had siblings, a total of 1,282 were currently enrolled in institutions of higher education. Table 30 shows that 1,032 (81 percent) of this group planned to continue their education themselves.

Apparently the presence of siblings in college tends to produce a secondary influence upon the other children in the family. Of the 1,083 (84 percent) who reported having one sibling currently enrolled in an institution of higher education, 80 percent were headed for college themselves. The proportion of college bound increased to 89 percent when two siblings were in college. The environmental conditions which made it possible for the older children to attend also appear to be operating for the younger children.

Table 30

Presence of Siblings in Institutions of Higher Education

Number of Siblings Currently in College	College Bound Students			Noncollege Bound Students			Total Graduates	
	Number	Percent of Total College Bound	Percent of Total Graduates	Number	Percent of Total Noncollege Bound	Percent of Total Graduates	Number	Percent of Total
1	865	84%	80%	218	87%	20%	1,083	84%
2	134	12	89	17	7	11	151	12
3	18	1	86	3	1	14	21	2
4	3	Less Than 1	43	4	2	57	7	Less Than 1
5	2	Less Than 1	50	2	1	50	4	Less Than 1
6 or More	10	Less Than 1	63	6	2	37	16	1
TOTAL	1,032	--	81	250	--	19	1,282	--

In order to examine what effect the presence of siblings in college had upon the plans of the boy graduates and the girl graduates, Table 31 was developed.

Sex did not appear to be operating as a variable when the presence of brothers and sisters for the college bound were examined. The proportion of girls going was only significantly less if three or more siblings were attending college. However, Table 32 reveals that significantly more noncollege bound girls had siblings in college.

Table 31

Presence of Siblings in Higher Education Institutions by Sex for College Bound Students

Number of Siblings Currently in College	Male College Bound Students			Female College Bound Students			Total College Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
1	449	83%	52%	416	85%	48%	865	84%
2	69	13	52	65	13	48	134	11
3	10	2	56	8	2	44	18	2
4	2	Less Than 1	67	1	Less Than 1	33	3	Less Than 1
5	2	Less Than 1	100	0	0	0	2	Less Than 1
6 or More	8	1	80	2	Less Than 1	20	10	1
TOTAL	540	--	52	492	--	48	1,032	--

Table 32

Presence of Siblings in Higher Education Institutions by Sex for Noncollege Bound Students

Number of Siblings Currently in College	Male Noncollege Bound Students			Female Noncollege Bound Students			Total Noncollege Bound	
	Number	Percent of Total Males	Percent of Total Graduates	Number	Percent of Total Females	Percent of Total Graduates	Number	Percent of Total
1	99	86%	46%	119	88%	54%	218	89%
2	6	5	36	11	8	64	17	6
3	2	2	67	1	1	33	3	1
4	3	3	75	1	1	25	4	1
5	2	2	100	0	0	0	2	1
6 or More	3	3	50	3	2	50	6	2
TOTAL	115	--	46	135	--	54	250	--

V. SUMMARY

The purpose of this initial phase of the study was to examine some of the barriers which students encounter as they attempt to go on to higher education. The questions of major concern which were posed to this sample of New York State seniors dealt with their post high school plans, familial economic factors, proximity to institutions of higher education, scholastic standing, peer values and influences, familial values and influences, impact of the secondary school guidance program, social class, and sex. A total of 5,175 seniors in 101 public high schools in New York State were administered a questionnaire in June 1968. The major findings appear in this chapter.

Approximately two-thirds of the students studied reported plans to continue their education in September 1968. Significantly more boys than girls planned to go on to college. The girls in the study were more likely to look for full-time employment. Despite the fact that the American female is marrying earlier and that other studies report increases in teenage marriages, only 1 percent of these girls expressed immediate plans to become full-time homemakers. However, they may marry and seek full-time employment, which may account for the low number in this category.

Of those students planning to continue their education, an obvious trend is to select publicly supported higher education institutions. This trend can be traced to the lower costs of public education, the accessibility of such institutions, and the quality of the education offered. In this study, there was an overwhelming preference for schools within the State.

The mean number of applications filed by these seniors was 2.78, which represents a slight increase over figures reported in a similar study made 8 years ago. The majority of all applications were submitted to the

4-year units of SUNY. These 4-year schools received a greater proportion of applications from girls than from boys. The 2-year units accounted for 25 percent of the total applications made, with the boys tending to submit most of the applications.

If a student decided to submit an application to a private institution, he was more likely to apply to a school outside of New York State. Publicly supported institutions outside of the State had relatively low attraction for these seniors. Despite the reputations and high visibility which some of these institutions enjoy, the increased cost of attendance there and the inability to use New York State scholarships may have a bearing upon the reluctance of students to select public institutions in other states.

The overall acceptance rate by institutions was found to be highest in the private institutions located within New York State. The lowest acceptance rate emerged in the 2- and 4-year units of SUNY. This phenomenon may be due to the innate prescreening process which occurs before an individual files an application to a private institution, e.g., higher tuition, costs, reputation enjoyed by the institution, and publicity on the institution's admissions standards.

The study showed that the probability of rejection tended to decrease as the number of applications submitted increased. The greatest probability for rejection occurred for individuals filing only one application. The loss of academically talented students from higher education is still readily apparent. Seven percent of all students in the upper quarter of their graduating classes failed to apply for admission to any institution. Sex still operates an an intervening variable in the college decision. This study, along with others, showed that girls in the upper quartile of their

graduating classes were less likely to attend college than boys from the same quartile.

The familiar relationship between social class and college interest has been again demonstrated. It was found that the higher a student's socioeconomic class, the greater the probability that he would file a college application.

Examination of the future goals of the seniors revealed fairly traditional choices. The boys displayed a preference for engineering, science, and business, while the girls were interested in careers in business, teaching, and nursing. Mathematics, the humanities, and social sciences were attractive for only a few of the seniors. Approximately one-tenth of the group were unable to focus on a clear-cut vocational goal.

There was a close relationship between class rank and RSCQT scores. The higher a student's rank in class, the greater was the probability that he would achieve well on the RSCQT. A comparison between social class and RSCQT scores showed that the probability of high achievement increased as social class increased.

The individual counseling received by the seniors was greater for college bound students than for the noncollege bound. Group guidance as a technique was infrequently used.

Parents exerted the greatest influence upon a student's future plans. Boys planning to continue their education were more influenced by significant adults while girls, except for their parents, tended to be more influenced by classmates and siblings. Both boys and girls not continuing their education sought counsel from individuals outside of the school establishment.

Parents were somewhat more reluctant to assume financial obligations for their daughters' future education than for their sons', although only one-tenth of the students felt that their parents were unwilling or unable to render any financial assistance. Over half the total group studied will require financial assistance during the first year of college. There was no relationship between financial requirements and academic achievement, since need appeared on all levels in almost equal proportions. Boys showed a greater degree of willingness to borrow for their education and also to work part-time than did girls. Summer work was seen as the most desirable and viable method of financing an education. The financial barrier did not seem to prevent enrollment plans, but may be more closely related to college attrition than to the "go" or "no go" decision.

Proximity to an institution of higher education did appear to boost the college-going rate when a 4-year institution or a 2-year and 4-year institution were close to an individual's home. Only 3 percent of the seniors said they were not within 25 miles of either a 2- or 4-year institution.

College bound students feel significantly more parental influence than the noncollege bound. In fact, the relative freedom from adult influence appeared to be a characteristic of the noncollege bound students. Since the noncollege bound reported infrequent communication with adults on future plans, one can only speculate how they resolve their planning.

In January 1969, a followup study of 20 percent of this population was conducted to determine to what extent the students actually followed through on their declared plans, and to examine the factors which caused them to change their plans. These findings will be released in a future publication as part of Phase II of the overall study.

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Appendix

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NEW YORK 12224

LORNE H WOOLLATT
ASSOCIATE COMMISSIONER FOR RESEARCH
AND EVALUATION

April 19, 1968

The Bureau of Research in Higher and Professional Education of the New York State Education Department is currently undertaking a study to determine the barriers high school seniors encounter when attempting to go on to higher education.

Your school along with one hundred and eleven other public secondary institutions comprise a representative sample of New York State Public Schools. We are seeking your cooperation in making this study a valuable contribution to secondary educators and college personnel workers.

The study would involve members of your senior class to be selected by a randomized drawing process. (This sample would constitute approximately one-third of the senior class students.) Should you agree to participate, a complete set of instructions, plus the necessary student questionnaires, will be sent to you in May of this year.

We recognize that the end of the academic year is a busy one, especially for guidance counselors. Therefore, we have endeavored to engage a minimum of your staff's time. The students would complete the questionnaire on their own time (approximately 30 minutes) and return it to the counselor. Acting as our intermediary your staff designee would:

1. Make student selections according to instructions to be provided.

2. Distribute questionnaires and envelopes to students selected.

3. Collect questionnaires in sealed envelopes from students.

4. Return sealed envelopes plus a list of participants names and addresses.

A follow-up will be conducted during the first semester of the 1968-69 academic year. The New York State Education Department will contact the individual students directly during the Fall follow-up.

All participating schools will receive a copy of the final report.

You will find a postcard enclosed. Please indicate your desire to participate or not and return the card as soon as possible. All future contact will be made by the Division of Research, Carl E. Wedekind, Director.

Sincerely,

Walter Crewson

Walter Crewson
Associate Commissioner for
Elementary, Secondary, and
Continuing Education

Lorne H. Woollatt

Lorne H. Woollatt
Associate Commissioner for
Research and Evaluation

Enc.

cc: Superintendent
Counselor

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NEW YORK 12224

WILLIAM D. FIRMAN
ASSISTANT COMMISSIONER FOR
RESEARCH AND EVALUATION

DIVISION OF RESEARCH
CARL E. WEDEKIND, DIRECTOR
518: 474-5850

May 1968

Dear Principal:

Thank you for your prompt and affirmative response to our letter of April 19. Your school's cooperation as a participant in the New York State Education Department's study, "Barriers Affecting the Pursuit of Higher Education," is appreciated.

Directions for Sample Selection:

1. List all the senior class members in your school in alphabetical order. (This list should include all seniors irrespective of the curriculum they have followed.)

2. After the list has been compiled, select every third individual in the following manner:

   a. Cast a die to determine which of the first three individuals on the list will start the selection sequence. If a die is not readily available, the following suggested procedure is acceptable: a blind draw from three slips of colored paper or marbles. Please report method.

   b. Count down three from the individual selected by casting the die--this will yield the second designee for sample inclusion.

   c. Repeat the count of three, choosing every third student, until the list has been exhausted.

   d. Should additional questionnaires be required kindly contact this office via phone. (518-474-3918 collect.)

3. Please instruct the participants to answer the questions without consultation with their families or friends.

4. Instruct the participants to complete the questionnaire and return it in the envelope provided. The student should seal the envelope before delivering it to the school.

5a. Please emphasize to the participants that the information volunteered will be treated in a confidential manner and available only to the Bureau members engaged in the research project. Data will be given group treatment and no individuals will be identified in the research report.

b. Inform the student that he/she may be contacted directly by the New York State Education Department during the Fall follow-up.

6a. Please include a list of the names of the selected students, whether they responded to the questionnaire or not. Please include each students rank in class.

b. Provide a tally of the number of participants chosen and responding to the questionnaire.

c. Return the list with the sealed questionnaires in the envelope provided to:

The Bureau of Research in Higher and
Professional Education
Room 481 EBA
State Education Department
Albany, New York 12224

Thank you for your time and effort. When the Fall follow-up has been completed, each participating [illegible] will receive a copy of the final report.

Sincerely,

Carl E. Wedekind

CEW:tp

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
ALBANY, NEW YORK 12224

Appendix C

WILLIAM D. FIRMAN
ASSISTANT COMMISSIONER FOR
RESEARCH AND EVALUATION

DIVISION OF RESEARCH
CARL E. WEDEKIND, DIRECTOR
518· 474-5850

May 1968

Dear High School Senior,

You have been selected at random to participate in a special survey of the post-high school plans of 10,000 seniors in New York State. This survey is being conducted by the Bureau of Research in Higher and Professional Education and will enable the State Education Department to develop improved programs to meet the educational needs of all students in New York State.

Your cooperation in completing the attached questionnaire will enable us to gather the necessary data for the study. All information which you supply will remain confidential, and no names will appear in the final report. After you complete the questionnaire, please seal it in the envelope which has been provided before you return it to the faculty member responsible for collecting the completed questionnaires.

Thank you for your cooperation.

Sincerely,

Carl E. Wedekind

CEW: tp

HE-68-201

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Research in Higher and Professional Education
Albany, New York 12224

SENIOR SURVEY: 1968

INSTRUCTIONS: Please read each question carefully. Then select the answer which fits your personal situation best. Check the space in front of the letter preceding the answer you have chosen. In some questions you will be requested to write the answer in the blank provided. If a question does not apply to you and your situation omit it.

PLEASE PRINT

NAME _____ SEX _____
(Last Name) (First Name) (Middle Name) (M or F)

PERMANENT ADDRESS _____
(Street and Number)

_____ Tel: _____
(City) (State) (Zip Code) (Area Code #)

FATHER'S or GUARDIAN'S NAME _____
(Last Name) (First Name) (Middle Name)

FATHER'S or GUARDIAN'S ADDRESS _____
(Street and Number)

_____ Tel: _____
(City) (State) (Zip Code) (Area Code #)

SCHOOL NAME _____

SCHOOL DISTRICT _____

1. My plans for September 1968 are:

_____1) to continue my education.
_____2) to obtain full-time employment.
_____3) to seek an apprenticeship.
_____4) to enlist in the military service.
_____5) to become a full-time homemaker.
_____6) indefinite.
_____7) Other plans (please be specific)_____

_____

2. Does the item which you have checked in the first question represent what you really wish to do next year?

_____1) Yes
_____2) No

3. If you have answered NO in question #2, mark the item which is most representative of the course of action you would like to follow next year. (If #2 is Yes, omit answer.)

_____1) to continue my education.
_____2) to obtain full-time employment.
_____3) to seek an apprenticeship.
_____4) to enlist in the military service.
_____5) to become a full-time homemaker.
_____6) indefinite.
_____7) Other plans (please be specific) _____

_____

4. Indicate the type of institution you plan to attend.

_____1) a four-year private college.
_____2) a four-year public college.
_____3) a two-year private college.
_____4) a two-year public college.
_____5) a three-year nursing school.
_____6) Other type (please be specific) _____

_____

5. Do you believe you have been adequately informed regarding the opportunities open to you after high school?

_____1) Yes
_____2) No

6. Approximately how many <u>group</u> guidance sessions have you had with the guidance counselor during your senior year? Circle the appropriate number.

0 1 2 3 4 5 6 or more

7. Approximately how many <u>individual</u> counseling sessions have you had with your guidance counselor during your senior year? Circle the appropriate number.

0 1 2 3 4 5 6 or more

8. Have you followed a college-preparatory sequence in high school?

_____1) Yes
_____2) No

9. What three-year sequence did you follow?

_____1) Science
_____2) Mathematics
_____3) Foreign Language
_____4) Music
_____5) Art
_____6) Industrial Arts
_____7) Trade and Technical Education
_____8) Business and Distributive Education
_____9) Agriculture
_____10) Home Economics
_____11) Health Industries Occupation
_____12) Other_____

10. When did you make the decision to go or not to go to college?

_____1) the senior year.
_____2) the junior year.
_____3) the sophomore year.
_____4) the freshman year.
_____5) in junior high school.
_____6) in elementary school.

11. Have you applied for admittance to a college?

_____1) Yes
_____2) No

12. Circle the number which represents the colleges to which you have requested admittance.

0 1 2 3 4 5 6 7 8 or more

13. List all the colleges to which you applied. (If more space is needed use back of form.)

1)_____
2)_____
3)_____
4)_____
5)_____
6)_____

14. How many colleges have accepted you?

0 1 2 3 4 5 6 7 8 or more

15. List the colleges which accepted you and rank them according to your preference.

1)_____
2)_____
3)_____
4)_____
5)_____
6)_____

16. Did any college representative talk to you about going to college?

_____1) Yes
_____2) No

17. Did you visit the colleges to which you have applied?

_____1) Yes, all of them
_____2) Yes, some of them
_____3) No

18. Do you believe that students who go away to college benefit more than students who live at home and commute to college?

_____1) Yes
_____2) No

19. What do you consider the most important reason for attending college?

_____1) to prepare for a career.
_____2) to learn a specific skill.
_____3) to help yourself prepare to live a better life.
_____4) to gain status and prestige.
_____5) to meet people and have a good social life.
_____6) to find a suitable husband or wife.
_____7) Other (please be specific_____

20. Do you think you will have a better chance to meet the type of person you want to marry if you go to college?

_____1) Yes
_____2) No

21. Please indicate the field of study or goal you intend to pursue at this time.

_____1) Agriculture
_____2) Business
_____3) Engineering
_____4) Science
_____5) Nursing
_____6) Mathematics
_____7) Humanities
_____8) Teacher Education
_____9) Social Science
_____10) Undecided
_____11) Other _____
_____

22. Will you attend college on:

_____1) a full-time basis.
_____2) a part-time basis.

23. Are you willing to borrow money to help pay for your education?

_____1) Yes
_____2) No
_____3) Undecided

24. Are you planning to work part-time to support yourself while attending college? (Answer only for the school year.)

_____1) Yes
_____2) No
_____3) Undecided

25. Do you plan to work in the summers to earn funds to meet college expenses?

_____1) Yes
_____2) No
_____3) Undecided

26. Will you attend college within the State of New York?

_____1) Yes
_____2) No
_____3) Undecided

27. BOYS ONLY ANSWER THIS QUESTION: Have the prospects of being drafted into military service caused you to delay for a college education?

_____1) Yes
_____2) No
_____3) Undecided

28. If you are going into the military service, do you think you will use the GI Bill as a means of obtaining further education after you are discharged from the service?

_____1) Yes
_____2) No
_____3) Undecided

29. Rank the following in order of the amount of influence they had upon the plans you have made. (#1-greatest to #8-least)

_____1) parents
_____2) brothers or sisters
_____3) close relatives
_____4) adult friends
_____5) a teacher
_____6) a guidance counselor
_____7) a clergyman or pastor
_____8) a school friend/or friends

30. If you are definitely <u>not</u> continuing your education beyond high school, indicate below which best describes the reason.

_____1) Lack of money
_____2) Lack of interest in studying
_____3) A desire to work and make a salary
_____4) A desire to marry and raise a family
_____5) A desire to get your military obligation completed
_____6) Parental opposition to your attendance at college
_____7) Necessity of earning money to support your family
_____8) Indecision about what kind of work you want to study
_____9) The work you plan to do does not require a college education.

31. If you do not plan to attend college next fall, do you believe you may attend sometime in the future?

_____1) Yes
_____2) No
_____3) Undecided

32. If you are going to be employed full-time after high school, please check the appropriate item below:

_____1) I have accepted a job.
_____2) I have applied, but do not have a job.
_____3) I have not applied for a job.
_____4) I will continue in my present part-time job on a full-time basis.

33. If you already have a job, please describe it briefly.

_____

34. Who was most responsible for your success in obtaining employment?

_____1) myself
_____2) your parents
_____3) school officials
_____4) relatives
_____5) friends
_____6) a governmental employment agency
_____7) a private employment agency
_____8) Other (please specify)_____
_____

35. If you plan to enter a vocational school or become an apprentice, please specify the course or field of study which you will pursue.

Vocational School_____
(Type of training, drafting, etc.)

Apprenticeship_____
(Specify trade or field of work)

36. How did you obtain information on apprenticeship programs?

_____1) from the guidance counselor
_____2) from your parents
_____3) from a union representative
_____4) from a friend
_____5) Other (please specify)_____
_____

37. If you are not now planning to attend college, would you consider attending if there was a college within commuting distance of your home?

_____1) Yes
_____2) No
_____3) Undecided

38. Do you believe that a college education is necessary to obtain status and money?

_____1) Yes
_____2) No
_____3) Undecided

39. Do you think that a college education is more important for a boy tha for a girl?

_____1) Yes
_____2) No
_____3) Undecided

40. Is there a 2- or 4-year college within 25 miles of your home?

_____1) Yes, a 2-year college
_____2) Yes, a 4-year college
_____3) Yes, both a 2- and 4-year college
_____4) Neither type of college
_____5) I do not know

41. Are most of your friends going to college?

_____1) Yes
_____2) No

42. Have you been aware of your standing/rank in your senior class?

_____1) Yes
_____2) No

43. Has the guidance counselor informed you of your scores on any intelligence tests or measures?

_____1) Yes
_____2) No

44. Have you taken the New York State Regents Scholarship Examination?

_____1) Yes
_____2) No

45. Have you taken the National Merit Scholarship Examinations?

_____1) Yes
_____2) No

46. Have you taken the College Entrance Examination Boards? (Scholastic Aptitude Tests)

_____1) Yes
_____2) No

47. If you answered yes in the previous question, what was your score on the Scholastic Aptitude Tests?

Verbal	Math
_____1) 200-299	_____1) 200-299
_____2) 300-349	_____2) 300-349
_____3) 350-399	_____3) 350-399
_____4) 400-449	_____4) 400-449
_____5) 450-499	_____5) 450-499
_____6) 500-549	_____6) 500-549
_____7) 550-599	_____7) 550-599
_____8) 600-649	_____8) 600-649
_____9) 650-699	_____9) 650-699
_____10) 700-749	_____10) 700-749
_____11) 750-800	_____11) 750-800
_____	_____Results not available to me.

48. Were you aware of any scholarships or other sources of financial aid which are available to you?

_____1) Yes
_____2) No

49. Have you been awarded any type of scholarship for next year?

_____1) Yes
_____2) No

If yes, please name the scholarship source (s)_____ _____

_____

50. Do you currently reside with:

_____1) both parents
_____2) widowed parent
_____3) divorced or separated parent
_____4) other relative
_____5) none of the above

51. How would you describe the community in which you reside?

_____1) a large city
_____2) a small city
_____3) a suburban community
_____4) a rural community
_____5) a small town remote from urban centers

52. How many brothers and sisters do you have? Circle the appropriate number.

0 1 2 3 4 5 6 or more

53. How many of your brothers and/or sisters are presently attending college? Circle the appropriate number.

0 1 2 3 4 5 6 or more

54. (Omit this question if you are an only child.) Circle the number of years of higher education completed by your brothers and/or sisters.

a. Brother, Sister (Cross out one) Years 1 2 3 4 5 6 or more

b. Brother, Sister (Cross out one) Years 1 2 3 4 5 6 or more

c. Brother, Sister (Cross out one) Years 1 2 3 4 5 6 or more

d. Brother, Sister (Cross out one) Years 1 2 3 4 5 6 or more

55. Please check the highest level of formal education completed by your father.

_____1) 6th grade or less
_____2) 7-9 grade
_____3) 10-11 grade
_____4) graduation from high school
_____5) 13-15 years of education
_____6) graduation from a 4-year college
_____7) completion of a master's degree
_____8) completion of a doctor's degree

56. Please indicate the highest level of formal education completed by your mother.

_____1) 6th grade or less
_____2) 7-9 grade
_____3) 10-11 grade
_____4) graduation from high school
_____5) 13-15 years of education
_____6) graduation from a 4-year college
_____7) completion of a master's degree
_____8) completion of a doctor's degree

57. My father's occupation is (check one). Please read each item carefully.

_____1) Higher Executive, owner of a large business firm or major professional (college teacher, economist, lawyer, doctor, chemist, dentist, etc.)

_____2) Business manager, owner of a medium-sized business, or lesser professional (nurse, social worker, teacher, etc.)

_____3) Administrative Personnel, small independent businessman, or minor professional (photographer, lab assistant, landscaper, surveyor, etc.)

_____4) Clerical or sales worker, owner of a small business ($3,000 to $6,000, or technician.

_____5) Skilled manual employee (barber, carpenter, electrician, policeman, housepainter, etc.)

_____6) Machine operator or semi-skilled employee (taxi driver, foundry worker, factory machine operator, welder, etc.)

_____7) Unskilled employee (laborer, laundry worker, farm helper, etc.)

_____8) Unemployed

58. If your mother has a full-time job, please indicate the type of work she does by placing an "M" in front of the appropriate category in question 57.

59. To what degree have your parents influenced your plans for next year?

_____1) to a very great extent
_____2) very much
_____3) to some extent
_____4) very little
_____5) not at all

60. Have your mother and father shown regular interest in the quality and progress of your work in school?

_____1) Yes
_____2) No
_____3) Irregular interest

61. How often have you discussed your plans with your parents?

_____1) frequently
_____2) quite often
_____3) seldom
_____4) never

62. Have your mother and father actively encouraged you to continue your education?

_____1) Yes
_____2) No

63. Have your parents expressed a willingness to help pay for your education?

_____1) Yes
_____2) No

64. What percentage of college expenses do you think your parents can afford to pay?

_____1) 100%
_____2) 50%
_____3) 25%
_____4) nothing

65. Are your parents willing to borrow money to finance your college education?

_____1) Yes
_____2) No
_____3) Don't know