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ABSTRACT

A questionnaire was mailed to all 195 4-year colleges and universities, junior colleges, and professional schools in the New England states to obtain information about their attitudes and policies toward the admission of deaf students. Among the 70 percent of the schools who responded to the survey, policies towards deaf students who were able to talk were somewhat negative and admission criteria for the deaf unable to talk were definitely restrictive. The main reason given for the negative policies was the limited facilities of the institutions. Students generally applied to schools with larger student bodies, residential accommodations, good physical facilities, greater choice of electives, higher tuition, and advance degree availability. The questionnaire and a bibliography are appended. Numerous tables present the data. (BC)

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THE DEAF STUDENT IN HIGHER INSTITUTIONS OF LEARNING
A STUDY OF POLICIES AND ATTITUDES OF ADMISSIONS OFFICERS
IN NEW ENGLAND COLLEGES AND UNIVERSITIES

by

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Department Of Rehabilitation And Special Education
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In Collaboration With
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Highlights

Findings of this study indicated that within the 70% of the institution of higher learning in New England there was essentially limited experience with deaf students. Attitudes and policies of admissions officers toward the admission of deaf students who are able to talk were somewhat negative. However, in the case of deaf students who are unable to talk almost half the admissions officers admitted to negative policies. The principal reason cited for such negative policies was limited facilities of the institution to meet the deaf students' needs.

Mainly, deaf students have been applying to the larger schools in terms day student body, residential accommodations, physical facilities as well as schools with greater choice of electives, higher tuition and advanced degree availability. With the exception of the residential facilities variable institutions having these characteristics have positive or at least not negative policies toward the admission of deaf students.

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PREFACE

Whenever there is neurosensory impairment in an individual, a certain amount of sensory deprivation ensues. In the case of deafness this deprivation and its concomitant isolation can lead to dependency. Some deaf individuals fall into a morass of dependent behavior which impedes their progress throughout life. Other deaf persons can be helped to partially overcome their dependency, if their motivation can be effectively developed. One way of helping the deaf individual to combat dependency is by increasing his feelings of adequacy through education. The educational milieu in which the deaf student finds himself can be a strong source of motivation for academic success or failure. It is the purpose of this monograph to provide a global picture of the existing problems in the field of higher education for the deaf. The attitudes of admissions officers of higher institutions of learning in the New England states toward the totally deaf student was studied. The research was carried out as part of a planning grant to determine the need for a special regional counseling facility for deaf students attending college with students of normal hearing. Other studies being published in professional journals investigate the attitudes of deaf high school students regarding their attendance at regular colleges as well as the attitudes of parents of deaf students in regard to hearing colleges for their children.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
PREFACE	iii
LIST OF TABLES	v
CHAPTER ONE: Higher Education of the Deaf: The Problem	1
CHAPTER TWO: Characteristics of the Population	11
CHAPTER THREE: Experience of Higher Institutions of Learning with Deaf Students	16
CHAPTER FOUR: The Admissions Policies of Higher Institutions of Learning Toward the Deaf	25
CHAPTER FIVE: Applicants to Higher Institutions of Learning .	37
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	43
APPENDICES	49
A: Questionnaire	49
B: Cover Letter	54
REFERENCES	55

LIST OF TABLES

Table	Page
1. Distribution of Institutions of Higher Learning by State.....	8
2. Distribution of Types of Institutions Participating in Study.....	8
3. Distribution of Types of Informants Participating.....	9
4. Size of Student Population (Residing on Campus).....	11
5. Day Students.....	11
6. Evening Students.....	12
7. Full-Time Faculty.....	12
8. Part-Time Faculty.....	13
9. Number of Buildings.....	13
10. Cost of Tuition.....	14
11. Highest Degree Granted by Institutions.....	14
12. Electives in Curriculum.....	15
13. Have Had Deaf Applicants and Admissions Policy Toward Able to Talk Deaf.....	17
14. Have Had Deaf Applicants and Admissions Policy Toward Unable to Talk Deaf.....	17
15. Reasons for College Rejection of Deaf Students.....	20
16. Deaf Students Graduated Able to Talk.....	22
17. Deaf Students Graduated Unable to Talk.....	22
18. Faculty-Student Ratio Within Higher Institutions.....	25
19. Admissions Policies and Elective Portion of Curriculum.....	26
20. Admissions Policies and Coeducational Status.....	27
21. Coeducational Status and Size of Day Student Body.....	27
22. Coeducational Status and Number of Physical Facilities.....	28

LIST OF TABLES (continued)

Tables	Page
23. Teacher-Student Ratio and Coeducational Status.....	29
24. Admissions Policy Toward Able to Talk Deaf and Number of Physical Facilities.....	30
25. Admissions Policy Toward Able to Talk Deaf and Length of Course...	30
26. Admissions Policies and Length of Course.....	31
27. Admissions Policies and Student Residence on Campus.....	32
28. Residence on Campus and Physical Facilities.....	33
29. Student Residence on Campus and Faculty-Student Ratio.....	33
30. Admissions Policies Toward Unable to Talk Deaf and Degree Granted.	34
31. Admissions Policies for Able to Talk Deaf Students and Religious Sponsorship.....	35
32. Admissions Policies for Unable to Talk Deaf Students and Religious Sponsorship.....	35
33. Higher Institutions of Learning with Deaf Applicants and Tuition Level.....	37
34. Applicants to Higher Institutions of Learning and Level of Degree Granted.....	38
35. Highest Degree and Number of Day Students.....	38
36. Degree Awards and Physical Facilities.....	39
37. Degree Awards and Faculty-Student Ratio.....	39
38. Deaf Applicants and Number of Buildings.....	40
39. Deaf Applicants and Size of Student Body Day Students.....	40
40. Number of Deaf Applicants and Size of School's Resident Population	41
41. Deaf Applicants and Degree of Elective Freedom in Curriculum.....	41

CHAPTER I

HIGHER EDUCATION OF THE DEAF: THE PROBLEM

Deafness is a disability uniquely complicated in that it leaves the person dependent upon his vision for the acquisition of most information. The effects of deafness are evident in the education process. The communication barrier which a deaf person faces poses a wide range of psychosocial problems with his significant others as well as with those with whom transient contact is made (5). Although there are a number of variables that interact to affect the extent of these psychosocial problems ("the degree of hearing loss,...the age of onset of hearing loss,...the site of the lesion,...the method of communication used by the individual,...(and) the deaf person's attitude toward his deafness" (1)), all deaf people are handicapped in that special education procedures must be adapted to cope with the communication barrier involved in their acquisition of knowledge. This must be accomplished by methods appropriate for later application of this knowledge to a world of hearing people--that is, if the individual elects to relate to the hearing world. But, whether the deaf individual reacts to his disability by shunning the deaf or the hearing, or by doing his best to adjust to both societies, the educational process is basic to his rehabilitation. Higher education can effectively help many handicapped individuals obtain a higher self-image in spite of their limitations. The deaf, however, are confronted with particular motivational problems.

Due to the sparse sample of professional people who are deaf, deaf students have few vocationally successful individuals with whom to identify as role models and, thus, may identify with less prestigious occupations. In a 1959 survey by Lunde and Bigman (9) only 528 "professional, technical, and similar workers" were reported among 7,920 respondents. Of these most were teachers and technicians, with only 1 lawyer, 2 social workers, 3 journalists, and 8 clergymen reported.

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More recent research on deaf people in professional employment--the Vocational Rehabilitation Administration project of Alan B. Crommatte, Gallaudet College, 1965--does provide a wealth of information on 87 professionally successful deaf individuals who could be cited as encouraging examples for young deaf adults. Yet, to date there is no evidence of any substantial increases in the number of deaf individuals who have acquired professional employment. The percentage of deaf professionals continues to remain small. If professional employment can be considered the result of continued educational efforts, then deaf students are either not taking initiative or are being denied opportunities. The facts do indicate that the deaf are generally in the lower socio-economic job categories. In the New York State Psychiatric Institute population* (13) 87.5% of the deaf males were employed in manual labor (30.4% unskilled). Less than 3% were employers or businessmen, while 6% were clerical workers. There were no professionals in the group. In a population of 264 respondents, 47.8% of the males had a weekly income under \$75 while 75.8% did not reach the \$100-a-week level. Ninety-seven percent of the females earned under \$75 per week while none earned \$100 per week. There is no reason to believe that, in a general way, these statistics are atypical for New York State or for the nation. The report of the Babbidge Committee (1) pointed out that five-sixths of the deaf adult population work at manual jobs as compared to one-half of the adults in the normal hearing population. It appears obvious that higher education for the deaf is one solution.

The difficulties encountered by totally deaf students who attend hearing colleges are great. These stem from a lack of adequate academic information and from psychosocial conflicts which result from the intrapsychic problems associated with deafness. Such intrapsychic problems evolve in part from and

*A population of 2,857 names was selected for this study. The deaf population over 12 years of age in New York State is estimated at 10,355. Only totally hearing loss of at least 80 decibels (were considered).

are compounded by attitudes of the hearing world. Detmold (4) pointed out that, of any recent age group, less than 5% of deaf students will complete a college education as compared with 22% of the normal population. Klinghammer (7) found that those with hearing associate the deaf individual with "mental disorder and retardation." Moreover, the New York State Psychiatric Institute study showed that the deaf were quite aware of the attitudes of the hearing toward them. They felt pitied, rejected, and misunderstood (13). Statistics of the federal government (15) indicate that, in general, the deaf population of the United States is academically retarded between four and seven years.

The few studies that have been done show that, in spite of a verbal gap, academic deficit, negative public attitudes, and psychosocial problems, the deaf can and do succeed in colleges for normal hearing students. Bigman (2) conducted a study which was based on two mail surveys sent out in 1955. One consisted of an inquiry to registrars of 1,851 colleges. The other consisted of a one-page schedule to be completed by the student in each school reporting any deaf students pursuing study on a full-time basis. On admission of deaf students to hearing colleges, the author suggested that comments from registrars on their willingness or unwillingness to accept deaf students had overtones of prejudice. Comments that deaf students needed special attention or were incapable of completing certain courses were characteristic of the stereotyped attitudes toward ethnic minorities. These were described as working in two ways. The deaf might be excluded from a school where they would be capable of doing the work, or some admissions officer might make allowances, admitting them because they are deaf and encouraging the conferrence of a degree which was not earned. The author stated that the deaf student must be viewed on his merits as an individual.

In courses, the opinions of both the registrars and the students from the

survey agreed that "lipreading skill explained the relative academic success of these students." On the other hand, Bigman continues, 26 out of 35 students reported that they used the notes of a good student in the class and two reported using teachers' notes. In the area of academic achievement 27 of the registrars stated that their deaf students were able to keep up academically with classmates. Registrars' observations pointed to good social adjustment in college. Many participated in organizations, fraternities, teams, etc. The data also indicated that many of those participating held offices. Of the 35 students, 21 reported living in dormitories.

From a questionnaire survey conducted by Breunig (3) replies were received from 75 deaf students (49 males and 26 females) known to have attended colleges and universities with the hearing. An analysis of the data led to the conclusion that deaf students may successfully attend colleges with the hearing when academically and psychologically qualified to do so. This study indicated that effective oral education, including lipreading and speech, is mandatory at primary and intermediary levels, and attendance in secondary schools with the hearing is a prerequisite to success in college with the hearing. Moral support of parents and teachers and motivation for achievement were also influential factors in students attending college with the hearing. Specific findings were as follows:

- 1) The majority of deaf students relied heavily on classmates for acquisition of material.
- 2) The majority were able to get along without tutoring or individual conferences and still make creditable grades.
- 3) The majority indicated good relationships with classmates.
- 4) The majority of students participated in extracurricular activities, possibly to help them gain acceptance into the social realm.

5) Foreign languages did not prove to be a stumbling block to the deaf who completed college.

In an extensive study by Quigley et al (16) 1,008 comprehensive questionnaires were sent to deaf and hard of hearing students who were a part of the student body in hearing colleges. Of the 653 questionnaires used, results indicated that 224 students, or approximately one third, had earned a bachelor's degree or higher. One hundred thirty-one of the hearing-impaired students dropped out of college, but of these approximately one third earned associate degrees; thirty-nine of the students transferred to Gallaudet College. The potential for success of the totally deaf student in the hearing college is demonstrated by Quigley's finding that 66% of the totally deaf students in the sample earned bachelor's degrees; of these 23% had at least one graduate degree.

In a Volta Review editorial (6) optimism was expressed by the authors about the potential for educating the deaf in hearing colleges. Volta Review surveys have shown that some deaf high school graduates go on to higher education in colleges and universities for the hearing, but too many are frightened off by lecture halls and impersonal faculties. College enrollments will increase in the coming years. Instead of serving as a deterrent to education of the deaf, colleges may promote deaf enrollments by providing certain changes:

- 1) The presentation of small seminars, formerly reserved for seniors, to freshmen in some Eastern universities.
- 2) Replacement of large lecture stadiums by extended periods of independent study during which the student does most of his work in libraries and through personal conferences with instructors.
- 3) Elimination of final exams in the senior year.
- 4) Use of teaching machines to supplement the faculty.

- 5) Transference of classrooms into some dormitories in some colleges.
- 6) Institution of year-round colleges.
- 7) Establishment of more junior colleges with programs which lead to jobs or to four-year colleges.

These innovations would suit the deaf student's needs. He would be able to understand instruction in a small group, be able to do independent study, be able to use films and programmed materials.

Olshansky and Margolin (14) described rehabilitation as taking place within the context of the interaction of social systems or subsystems which affect the client. One such major social subsystem is the educational system. It can be safely stated that the psychosocial position of the deaf client is directly related to the manner in which he is educated. Thus, the acceptance or rejection of a deaf applicant by an institution of higher learning can be a variable in affecting his level of adjustment to life.

The needs of the deaf for higher education are not being met at an adequate level. It was the purpose of this study to investigate the nature of policies and procedures of institutions of higher education in regard to admission and attendance of profoundly deaf students as well as to describe the attitudes of admissions officers in this area. In addition, reported experiences of the higher institutions with deaf applicants and students will be reviewed.

Method

A questionnaire (see Appendix A) was mailed out to 195 four-year colleges and universities, junior colleges, and professional schools in the New England states. As far as could be determined, this constituted all the institutions

of higher learning in New England (excluding schools of music and seminaries). One hundred forty-two institutions responded, of which five were not used because they referred to the main branch of the university which administered their admissions procedures. Thus, the sample consisted of 137 institutions or 70.2% of the universe. The term deaf is used in this study to denote total deafness (no residual hearing). Table 1 indicates the distribution of higher institutions of learning by state. Table 2 shows the distribution of institutions by type.

Table 1

<u>Distribution of Institutions of Higher Learning by State</u>	
<u>State</u>	<u>Percent</u>
Connecticut	17.5
Maine	13.1
Massachusetts	49.5
New Hampshire	5.8
Rhode Island	5.1
Vermont	8.8
<hr/>	
N=137	

Table 2

<u>Distribution of Types of Institutions Participating in Study</u>	
<u>Type</u>	<u>Percent</u>
University	10.9
Liberal arts college	40.9
Junior college	21.9
Professional school	9.5
Four year college combination (i.e., B.A. and med. tech., Engineering and Liberal Arts)	2.2
Teachers college	9.5
Theology school	1.5
Technical school	3.6
<hr/>	
N=137	

The cover letters (see Appendix B) were sent to directors of admissions. However, in some cases the questionnaires were passed on to individuals in other positions in the institution probably because it was felt that their positions and activities better qualified them to answer the questions. Table 3 shows the distribution of informants who responded.

Table 3

<u>Distribution of Types of Informants Participating</u>	
<u>Position held in institution</u>	<u>Percent</u>
Director of admissions	67.2
Admissions counselor	1.5
Guidance counselor	1.5
Registrar	4.5
Researcher	.7
Dean	12.7
Assistant to dean/or Assistant to official	5.9
Academic services	1.5
Placement office	.7
Executive of institution (President/Vice-President)	3.7
<hr/>	
N=134	

For the most part items on the questionnaire were easily codable. Certain questions, however, called for open-ended responses. In addition, informants were invited to express at the end of the questionnaire their individual comments and ideas on the higher education of the deaf. Thus, this study is based on qualitative as well as quantitative information. Data were analyzed by cross tabulation. Significance was established using the chi square test.

To be accepted as significant, a chi square value had to have a probability of 5% or less. Although the actual completion of the questionnaire required between one and two hours, the gathering of some of the data by the respondents required much more time and in some cases may have extended over a period of days. In evaluating completeness of data, one cannot eliminate the possibility of questions not being answered because of the reluctance of respondents to commit themselves or their university by volunteering certain information.

CHAPTER II

CHARACTERISTICS OF THE POPULATION

Since one of the goals of this study was to determine what characteristics of higher institutions of learning might be associated with positive or negative admissions policies for the deaf, as well as the type college to which the deaf apply, data on such variables as size, type of faculty, tuition, sponsorship, degrees granted, etc., were collected. Tables 4 through 12 show the distribution of the sample of higher institutions on the basis of the characteristics considered.

Table 4

<u>Size of Student Population (Residing on campus)</u>	
<u>Number of Students</u>	<u>Percent</u>
0	16.5
1 - 100	10.2
101 - 500	37.8
501 - 1,000	20.5
More than 1,000	15.0
N=134	

Table 5

<u>Day Students</u>	
<u>Number</u>	<u>Percent</u>
0	1.7
Less than 1,000	59.9
1,000 - 4,999	35.2
5,000 - 9,999	1.6
More than 10,000	1.6
N=122	

Table 6

Evening Students

<u>Number</u>	<u>Percent</u>
0	45.7
1 - 1,000	37.1
1,001 - 5,000	14.6
More than 5,000	2.6
N=116	

Table 7

Full-Time Faculty

<u>Number</u>	<u>Percent</u>
Less than 100	75.8
100 - 500	20.3
501 - 1,000	2.3
More than 1,000	1.6
N=128	

Table 8

Part-Time Faculty

<u>Number</u>	<u>Percent</u>
Less than 100	92.0
100 - 500	6.2
501 - 1,000	.9
More than 1,000	.9
N=113	

Table 9

Number of Buildings

<u>Number</u>	<u>Percent</u>
Less than 10	50.4
10 - 59	44.2
60 or more	5.4
N=129	

14.

Table 10

<u>Cost of Tuition</u>	
<u>Cost</u>	<u>Percent</u>
Free to the individual	2.9
\$500 or below	23.9
\$501 - \$900	20.9
\$901 - \$1,400	29.1
\$1,401 - \$2,000	17.2
Above \$2,000	6.0
N=134	

Table 11

<u>Highest Degree Granted By Institutions</u>	
<u>Degree</u>	<u>Percent</u>
No degree granted	7.3
Associate's	17.6
Bachelor's	34.6
Master's	26.5
Doctorate	14.0
N=136	

Table 12

<u>Percent Electives in Curriculum</u>	
<u>Percent Electives</u>	<u>Percent of Curriculum Electives</u>
0	9.3
1 - 10	19.4
11 - 49	46.3
50 or more	25.0
N=108	

Coeducational institutions composed 63.2% of the sample, with 21.3% having all female undergraduate student bodies and 15.4% having totally male undergraduate populations. Fourteen percent had more than one campus. Some form of work-study or cooperative plan whereby students were able to earn all or part of their tuition was reported by 34.8% of the responding colleges. Of those institutions reporting a work-study or cooperative plan, 65.2% stated their plan covered all departments, 15.2% had a plan which covered many departments, while 19.6% described their plan as covering only a few departments. Twenty-three percent of the higher institutions of learning in the sample were sponsored by a religious group, of which 6.7% were Protestant, 90% Catholic, and 3.3% Jewish.

CHAPTER III

EXPERIENCE OF HIGHER INSTITUTIONS OF LEARNING WITH DEAF STUDENTS

In the total sample of admissions officers of the 137 higher institutions of learning who responded with usable data, 66% reported that they had not had a single deaf student apply for admission during the past five years. Although this appears startling, it is not surprising to those in the field of education of the deaf. When coupled with the finding that 48% of the institutions have a definite admissions policy which does not allow the acceptance of deaf students who are unable to speak adequately, it takes on added significance. Even in cases where the deaf applicant can speak intelligibly, 24% of the sample reported admissions policies against their acceptance. The major reasons put forth were:

- 1) Inadequate facilities to meet the needs of the deaf
- 2) Faculty not trained to work with the deaf
- 3) Too dangerous for the deaf to work in the technical and scientific fields requiring the use of machines and equipment

Thirty-one of the 34 responding institutions who have had deaf students apply reported no policy against the admission of deaf applicants who are able to talk. In the case of the 29 institutions who reported a positive admissions policy toward the deaf who are able to talk six of these qualified this positive policy by stating that the candidate must be able to lip read or require no special assistance (See Table 13).

Table 13

**Have Had Deaf Applicants and Admissions Policy
Toward Able to Talk Deaf**

	Have Had Deaf Applicants			
	<u>Yes</u>	<u>No</u>	<u>Total</u>	<u>Percent</u>
Would accept able to talk deaf applicants	29	47	76	62.295
Would not accept able to talk deaf applicants	3	27	30	24.590
No policy toward acceptance of able to talk deaf applicants	<u>2</u>	<u>14</u>	<u>16</u>	<u>13.115</u>
Total	34	88	122	
Percent	27.869	72.131		100.000

Table 14

**Have Had Deaf Applicants and Admissions Policy
Toward Unable to Talk Deaf**

	Have Had Deaf Applicants			
	<u>Yes</u>	<u>No</u>	<u>Total</u>	<u>Percent</u>
Would accept unable to talk deaf applicants	14	15	29	24.576
Would not accept unable to talk deaf applicants	14	46	60	50.848
No policy toward acceptance of unable to talk deaf applicants	<u>5</u>	<u>24</u>	<u>29</u>	<u>24.576</u>
Total	33	85	118	
Percent	27.966	72.034		100.000

Nineteen of the 33 responding institutions who have had deaf students apply reported no policy against the admission of deaf applicants who are unable to talk. In the case of the 14 institutions who report a positive admissions policy toward the deaf who are unable to talk, two of them qualified this position policy by stating that the candidate must require no special facilities or assistance or must pursue an educational goal clearly attainable within his demonstrated scholastic ability (See Table 14).

Many of the admissions personnel that responded expressed doubts concerning the capacity of deaf students to succeed in a college program without much special help which they felt unable to give. Some of these attitudes are summed up in the following excerpt from a letter received from the dean of admissions of a well-known New England college:

With your letter of March 29, you included a questionnaire for the New England Rehabilitation Research Institute concerning education of deaf students.

Since it is not our present policy to accept totally deaf students there seems to be little use in answering your questions. Our experience with the totally deaf has been limited. From it we found that we are not justified in accepting deaf students with those of normal hearing. In one case an especially intelligent student was able with a great deal of special help from the faculty to graduate; in a second case with even more help the student was not readmitted for the second year. We have no tutoring service as the faculty provide much extra time for student help. We found that the one deaf student was taking the time needed to be divided among the many to their loss. These students had had the advantage of good schools for the deaf plus orientation in public high school classes. They were unable to understand either oral lectures or oral directions. There was an emotional element that was not good for a student.

It would seem to me that a school would need a more rigidly "programmed" method of teaching with less individual work developed in class by instructors. Our sympathy is very much with the handicapped student but in our consideration of the one we cannot afford to lose sight of the ninety and nine. Please pardon our delay in getting this reply to you.

Other comments from admissions officers of higher institutions of learning, such as the following,* illustrate that the point of view expressed above is by no means rare or singular:

We have had extremely limited experience with deaf students.

Personally, I feel it is very difficult for them to follow college courses without special help.

I don't see how deaf students who are unable to talk could attend a "normal" college unless a modified program and a special degree were offered them. Perhaps three or four centers, nationally, could be set up to handle them.

Those able to talk, with good lipreading ability and high intelligence could conceivably "make it" through college with some difficulty. So much would depend on the aggressiveness of the student.

Since we have only what we term normal accommodations--we are a day school, etc.--we would not object to admitting a deaf student. This is a strenuous five year course and we feel only an exceptional student might succeed. The chances are slim though.

We will be pleased to consider deaf students, as long as we are sure that they can meet the everyday demands of the faculty and the other students. We are not equipped to handle special cases.

Attitudes such as those expressed above by college admissions officers can cause serious motivational problems for deaf students. For students who are applying to a higher institution, such attitudes may be a discouraging deterrent to college attendance. Because the deaf community (and it is, indeed, a community in the psychosocial sense of the term) is a relatively small and tightly knit group, negative attitudes of colleges toward academic success of the deaf soon become widely communicated among potential college students and their parents. Even if the admissions staff does not openly state its views to the student, ambivalent attitudes concerning the potential of the deaf for college success are communicated. Since the deaf frequently experience anxiety and fearfulness concerning unpredictability and new experiences, some students who

*Underlines supplied by authors.

might have attempted college will retreat.

While it would be psychologically detrimental to coddle and overprotect the deaf student in the college setting reality dictates that unless certain modifications in educational procedures are extended, the deaf student's success is harder to achieve. Negative motivation of deaf students in relation to college attendance may be reflected by the statistics that follow. Of the 35 institutions having had deaf applicants, 18 have had only one such applicant. Of these 35, 17 accepted one student, while only 2 accepted as many as 5 students. No institution had had more than five deaf students in the past five years. Of the 30 institutions who had accepted at least one deaf student, 20 were able to break down this acceptance according to the ability of the student to talk. Of this 20, 18 have not had a single unable to talk deaf student during the past five years, while two have had one such student.

Table 15 indicates the major reasons stated by admissions officers for the rejection of deaf applicants. It is understandable that a large percentage of

Table 15

<u>Reasons for College Rejection of Deaf Students</u>		
<u>Reason</u>	<u>N</u>	<u>Percent</u>
Academic record not adequate	14	58.3
Personality such that emotional adjustment would be difficult	0	0.0
Did not feel that the institution could adequately meet their needs	10	41.7
N=24		

deaf applicants would have academic records which are inadequate for college admission. However, it was noted that the ten admissions officers

stated that failure to admit their deaf applicants was based upon the feeling that the institution could not adequately meet the deaf students' needs. Although there is no data to support this hypothesis, it is speculated that many higher institutions of learning, particularly the smaller and more recently established ones, do not have the finances necessary to make such modifications and extend the necessary assistance to meet the educational needs of the seriously impaired deaf student.

None of the respondents gave as a reason for rejection of deaf applicants the difficulty of making an adequate emotional adjustment to college due to personality factors. Many college students without any physical impairment or communication defects may become emotionally disturbed adjusting to the stress and psychosocial demands of college. The psychological problems which the deaf suffer (isolation, feelings of rejection, feelings of inadequacy, overdependence) have been discussed in previous works (8, 10, 11, 12). It is hard to imagine that this reason was not given by one of the 24 institutions. An explanation of this result might simply be that admissions officers were reluctant to discuss personality factors in the absence of tangible information. Since admissions officers have valid and easily justified academic reasons for rejecting deaf students, they have little need to concern themselves with the psychological problems of the deaf.

It appears that the deaf student's ability to talk is a crucial variable in determining how far a hearing college will extend itself to help deaf students. Tables 16 and 17 show graduation statistics on able to talk and unable to talk deaf students, respectively. Thus 10 of the universities responding graduated one or more deaf students who were able to talk as opposed to only one who graduated one unable to talk deaf student. Yet, the fact remains that one unable to talk deaf student has successfully completed college. While he

Table 16

<u>Deaf Students Graduated Able to Talk</u>		
<u>Number</u>	<u>N</u>	<u>Percent</u>
0	10	50.0
1	6	30.0
2	0	0.0
3	2	10.0
4	1	5.0
Some, but no statistics	1	5.0
N=20		

Table 17

<u>Deaf Students Graduated Unable to Talk</u>		
<u>Number</u>	<u>N</u>	<u>Percent</u>
0	18	94.7
1	1	5.3
N=19		

may have been an exceptionally good student, this institution of higher learning did extend itself to be flexible and helpful. Perhaps the broader issue is to define the commitment colleges are willing to make to educate the seriously impaired deaf student or, indeed, any handicapped student. Some have expressed reluctance to educate the deaf student because of staff and time limitations and

the pressures on staff for the education of the non-impaired student.

For the 34 higher institutions of learning who have had deaf students apply no significant relationship was found to exist between acceptance or rejection of deaf students able and unable to talk and number of residential students, size of faculty, religious sponsorship, amount of tuition, proportion of elective courses, degree granted and coed status.

Some colleges are trying to integrate the deaf student, as is indicated by the following statements from admissions officers of two well-known urban universities:

I have been unable to answer some of the preceding questions simply because we have not isolated students with handicaps and made statistics of them. We have blind students, deaf students, students with epilepsy, amputees, etc. We are concerned only with their academic progress and look at them in terms of how well they have handled their program here as students, not as individuals with a disability. Overall I would say that our program has been quite compatible with deaf students. We certainly attempt to place them near the front of the class so that those who lipread could do so, and will also accomodate them in any other way possible.

I recall a case of one student with a substantial loss of hearing who led an isolated existence during his first semester at the University. At that time we were not as well structured for educating the physically handicapped as we are now, and I was not aware that this student was spending most of his time in his room and wasn't relating to other students until many weeks had passed. As this student was of a particular ethnic derivation, I decided that it would be appropriate to tie him in to an organization that was composed of students of that derivation. It worked very well. The members of the organization became quite involved with helping this student and conferred with me frequently. After an interval, a marked change was noted in the student, and his academic work improved significantly. This case illustrated the importance of relating a deaf student to a group. In considering the education of deaf students, we surely cannot overlook the inevitable feelings of isolation that will defeat the student unless he is intimately relating to a group of people.

Also very careful academic planning is required if a deaf student is to successfully complete degree requirements. I recall another case of a student with a substantial loss of

hearing who was enrolled in the College of Liberal Arts and Sciences as a science major. His grades were excellent in all courses except his foreign language where his inability to lipread defeated him. The student ran into a wall of frustration in taking the first language course three times. Under our University policy it is not possible to extend a waiver of a degree requirement to a student. I finally arranged for the student to transfer to the College of Agriculture where certain programs are comparable to a zoology major. The College of Agriculture does not have a language requirement. This student is now flourishing in his new academic program and plans to go on to graduate school. It is only this year that we have set up a Guidance Board for the Physically Handicapped. One of the responsibilities of this board is to make certain that the academic planning of a student's program is done early in his career at the University. If at the time this student initially enrolled we had had a Guidance Board, I am certain that he would have been dissuaded from enrolling in the College of Liberal Arts and Sciences.

The limited data that we do have from New England institutions of higher learning suggest that deaf students, both able and unable to talk, are capable of successfully attending and completing college with normal hearing students. The problems are great but not insurmountable. Whether or not the deaf student is accepted and is successful depends not only on the motivation and scholastic ability of the student but also on the commitment and attitudes of college officials.

CHAPTER IV

THE ADMISSIONS POLICIES OF HIGHER INSTITUTIONS OF LEARNING TOWARD THE DEAF

Admission of deaf students to higher institutions of learning ranges along a continuum. While no college or university makes an effort to encourage the application of deaf students, some are not negatively predisposed to their admission. Others are openly negative to the matriculation of deaf students at their institution.

One of the questions which this study sought to answer was whether or not there are particular characteristics associated with higher institutions that are more favorably disposed to attendance of deaf students at regular colleges with normal hearing students. The findings indicated the existence of such characteristics and these characteristics form a recognizable profile. The faculty-student ratio based on full-time faculty and day student populations is presented in Table 18. This ratio constitutes one important index of student adjustment

Table 18

<u>Faculty-Student Ratio Within Higher Institutions</u>	
<u>Faculty-Student Ratio</u>	<u>% of Higher Institutions</u>
1:(1-10)	19.4
1:(11-20)	58.3
1:(over 20)	22.3

potential. Since it is assumed the deaf student will need a considerable amount of extra academic help to compensate for his impaired ability to communicate, a low faculty-to-student ratio is desirable.

Able To Talk Deaf

Table 19 indicates that colleges or universities which allow for over 10% electives in their curriculum have more favorable admissions policies for able to talk deaf students than those which allow for 10% or less. The colleges

Table 19

<u>Admissions Policies and Elective Portion of Curriculum</u>			
	<u>10% or less</u>	<u>More than 10%</u>	<u>Total</u>
Would accept able to talk deaf applicants	14	57	71
Would not accept able to talk deaf applicants	12	12	24
No policy toward able to talk deaf applicants	<u>5</u>	<u>8</u>	<u>13</u>
Total	31	77	108

Chi Square = 8.84, df = 2, $p/ .02^*$

whose curriculum allows students more freedom in academic choice were shown to be the four year liberal arts type institutions ($X^2 = 6.38$, df = 1, $p/ .02$).

Results showed that higher institutions of learning which are coeducational have a more favorable admissions policy toward deaf students who are able to talk than non-coeducational colleges and universities (See Table 20).

* For this association at least one cell was observed to have an expected frequency of less than five. All possible comparisons were made using the Yates correction in order to insure the meaningfulness of the composite Chi Square.

Table 20

<u>Admissions Policies And Coeducational Status</u>			
	<u>Male or Female</u>	<u>Coed</u>	<u>Total</u>
Would accept able to talk deaf applicants	22	60	82
Would not accept able to talk deaf applicants	20	12	32
No policy toward able to talk deaf applicants	<u>8</u>	<u>13</u>	<u>21</u>
Total	50	85	135

Chi Square = 12.57, df = 2, $p < .01$

Larger day student bodies were associated with colleges which are coeducational. However, coeducational status and number of physical facilities appeared to be inversely related. These relationships are demonstrated in Tables 21 and 22, respectively.

Table 21

<u>Coeducational Status and Size Of Day Student Body</u>			
	<u>1,000 or less students</u>	<u>More than 1,000</u>	<u>Total</u>
Non-coeducational institution	31	9	40
Coeducational institution	<u>44</u>	<u>37</u>	<u>81</u>
Total	75	46	121

Chi Square = 6.11, df = 1, $p < .02$

Table 22

<u>Coeducational Status and Number of Physical Facilities</u>			
	<u>10 or less buildings</u>	<u>More than 10</u>	<u>Total</u>
Non-coeducational institutions	19	33	52
Coeducational institutions	49	43	92
Total	<u>68</u>	<u>76</u>	<u>144</u>

Yates Chi Square = 3.73, df = 1, $p < .06$

Experience has shown it is frequently necessary to make certain adjustments in the physical setting to meet the special needs of deaf students. Such factors as seating arrangement, placement of blackboards, size of classrooms, etc. are important in the transmission of academic information to the deaf student. Greater choice of physical facilities could enable the college to set up the optimum physical learning conditions for the deaf student. Yet, if the advantages of heterosexual social relationships are important to the psychosocial development of the deaf student, the possibility of better physical facilities may have to be sacrificed. On the other hand, if physical facilities are deemed more important, then the value of heterosexual social relationships must frequently be foregone.

The teacher-student ratio in coeducational settings, moreover, is higher than in non-coeducational settings (see Table 23). The latter relationship poses a dilemma for the deaf student. As noted in the preceding paragraph, a choice must be made. In order to gain the psychosocial benefits of heterosexual

Table 23

<u>Teacher-Student Ratio and Coeducational Status</u>				
	<u>1:(1-10)</u>	<u>1:(11-20)</u>	<u>1:(over 20)</u>	<u>Total</u>
Non-coeducational institutions	15	20	5	40
Coeducational institutions	9	49	18	76
Total	<u>24</u>	<u>69</u>	<u>23</u>	<u>116</u>

Chi Square = 10.91, df = 2, $p < .01$

associations he must, in many instances, accept student-teacher ratios which may preclude opportunities for the extra academic help which he frequently requires.

As indicated in Tables 24 and 25 higher institutions of learning with greater physical facilities (more buildings) had either positive policies or "no policies" relative to the admission of deaf students who were able to talk. However, four-year institutions were less favorable to the admission of deaf students who were unable to talk than were institutions with courses of study of less than four years' duration. Variables found to bear no relationship to admissions policies were: degree offered, cost of tuition, size of day student body and size of resident student body.

Thus far our discussion has concerned deaf college students who are able to talk. Such students are generally confronted with social and academic problems which are less demanding than those of the deaf student who is unable to talk.

Unable to Talk Deaf

Table 26 indicates that for the deaf students who are unable to talk, non-four-year higher institutions of learning are more accepting than four-year schools. It may be that junior colleges and non-four-year technical schools are more

Table 24

Admissions Policy Toward Able to Talk Deaf
and Number of Physical Facilities

	<u>/ 10</u>	<u>10</u>	<u>Total</u>
Would accept able to talk deaf applicants	34	43	77
Would not accept able to talk deaf applicants	22	9	31
No policy toward acceptance of able to talk deaf applicants	8	12	20
Total	64	64	128

Chi Square = 7.31, df = 2, $p \leq .03$

Table 25

Admissions Policy Toward Able to Talk Deaf
and Length of Course

	<u>4 years</u>	<u>Less than 4 years</u>	<u>Total</u>
Would accept able to talk deaf applicants	46	37	83
Would not accept able to talk deaf applicants	22	8	30
No policy toward acceptance of able to talk deaf applicants	18	3	21
Total	86	48	134

Chi Square = 8.09, df = 2, $p \leq .02$

Table 26

<u>Admissions Policies And Length Of Course</u>			
	<u>4 year schools</u>	<u>Non-4 year schools</u>	<u>Total</u>
Would accept unable to talk deaf applicants	16	18	34
Would not accept unable to talk deaf applicants	42	19	61
No policy toward unable to talk deaf applicants	<u>23</u>	<u>10</u>	<u>33</u>
Total	81	47	128

$$\text{Yates Chi Square} = \chi^2 = 5.24, \text{ df} = 2, p < .08$$

dependent upon tuition for their financial assistance and, thus, are more willing to take a chance on the progress of the seriously impaired deaf student. Moreover, some junior colleges and many technical schools which grant an associate's degree are apt to have somewhat lower academic standards than most four-year colleges. In addition, such vocationally-oriented schools may be more concerned with preparing students to fulfill a vocational function than they are with academic attainment. Thus, the lower academic ability of the deaf student is of less concern to the non-four-year school. Further, the application rate for four-year colleges is so high in comparison with junior colleges and technical schools that they are compelled to be more selective.

Yet, it is interesting to note that although the non-four-year institutions of higher learning are more accepting of the deaf student unable to talk, they

* For this association at least one cell was observed to have an expected frequency of less than five. All possible comparisons were made using the Yates correction in order to insure the meaningfulness of the composite Chi Square.

have the poorer faculty-student ratio ($\chi^2 = 23.92$, $df = 2$, $p < .001$).

Another interesting finding was that institutions of higher learning in which students do not live on campus tend to have a more favorable admissions policy for deaf students who are unable to talk than those in which students live on campus or no policy at all (see Table 27). Higher institutions of learning

Table 27

<u>Admissions Policies And Student Residence On Campus</u>			
	<u>None on Campus</u>	<u>1 - 1,000</u>	<u>Total</u>
Would accept unable to talk deaf applicants	7	24	31
Would not accept unable to talk deaf applicants	4	54	58
No policy toward acceptance of unable to talk deaf applicants	<u>8</u>	<u>23</u>	<u>31</u>
Total	19	101	120

Chi Square = 6.86, $df = 2$, $p < .08$ *

which do not have on-campus residential facilities for students are small institutions in terms of physical facilities (see Table 28). In addition, the ratio of faculty to students is higher (see Table 29). When the student does not live on campus, the demands upon the college administration to be concerned with the

* For this association at least one cell was observed to have an expected frequency of less than five. All possible comparisons were made using the Yates correction in order to insure the meaningfulness of the composite Chi Square.

student's social adjustment may certainly be less. In other words, the institutions of higher learning which are more accepting of deaf students are those which in terms of staff and facilities are the poorer schools.

Table 28

<u>Residence On Campus and Physical Facilities</u>			
	<u>None on Campus</u>	<u>1 - 1,000</u>	<u>Total</u>
10 or less buildings	23	38	61
More than 10 buildings	2	74	76
Total	25	112	137

Chi Square = 27.904, df = 1, $p < .001$

Table 29

<u>Student Residence On Campus and Faculty-Student Ratio</u>			
	<u>None on Campus</u>	<u>1 - 1,000</u>	<u>Total</u>
1 : (1 - 20)	6	85	91
1 : (Over 20)	10	11	21
Total	16	96	112

Yates Chi Square = 20.22, df = 1, $p < .001$

As indicated in Table 30 schools which offer advanced degrees do not have

Table 30

Admissions Policies Toward Unable to Talk Deaf and Degree Granted			
	<u>Bachelor's or less</u>	<u>Advanced degree</u>	<u>Total</u>
Would accept unable to talk deaf applicants	22	11	33
Would not accept unable to talk deaf applicants	40	23	63
No policy toward accep- tance of unable to talk deaf applicants	5	16	21
Total	67	50	117

Chi Square = 11.79, df = 2, $p < .01$

specific policies in regard to the admission of deaf students who are unable to talk. This finding suggests that advanced degree schools with their better facilities and possibly better faculty-student ratio would be more inclined to judge the admission of each deaf student on an individual diagnostic basis (substantiating data is presented in the chapter which follows).

As in the case of deaf students who were able to talk coed institutions had either no policies or positive policies toward the admission of deaf students who were unable to talk. However, in this only a trend in this direction was obtained ($\chi^2 = 4.92$, df = 2, $p < .09$).

Variables found to bear no relationship to admissions policies of deaf students who were unable to talk were proportion of elective subject in the curriculum, number of buildings or physical facilities, size of the day student body and tuition.

Able And Unable To Talk Deaf

It is interesting to note that secular schools are more accepting of deaf students than colleges and universities which are sponsored by religious groups. This finding holds for both able and unable to talk deaf students (see Tables 31 and 32).

Table 31

Admissions Policies For Able To Talk Deaf Students and Religious Sponsorship

	<u>Religious Sponsor</u>	<u>No Religious Sponsor</u>	<u>Total</u>
Would accept able to talk deaf applicants	8	74	82
Would not accept able to talk deaf applicants	17	15	32
No policy toward able to talk deaf applicants	5	16	21
Total	<u>30</u>	<u>105</u>	<u>135</u>

Yates Chi Square = 25. 093, df = 2, $p < .001$ *

Table 32

Admissions Policies For Unable To Talk Deaf Students And Religious Sponsorship

	<u>Religious Sponsor</u>	<u>No Religious Sponsor</u>	<u>Total</u>
Would accept unable to talk deaf applicants	1	32	33
Would not accept unable to talk deaf applicants	21	42	63
No policy toward unable to talk deaf applicants	7	26	33
Total	<u>29</u>	<u>100</u>	<u>129</u>

Yates Chi Square = 11.451, df = 2, $p < .01$

43

* For this association at least one cell was observed to have an expected frequency of less than five. All possible comparisons were made using the Yates correction in order to insure the meaningfulness of the composite Chi Square.

This finding is perhaps paradoxical since one would think that a denominational educational institution would by philosophy be positively disposed to the acceptance of the handicapped student. It should be noted that the population excluded acknowledged seminaries and schools of theology.

The data indicate that higher institutions of learning which have positive policies toward the acceptance of deaf students who are able to talk as well as unable to talk are receiving more deaf applicants than those which have unfavorable or no policies in this regard. It is difficult to ascertain whether this is due to knowledge on the part of deaf students concerning where they stand the best chance of acceptance or whether it is due to the institutions' having acquired favorable experience with the deaf student ($\chi^2 = 10.65$, $df = 2$, $p < .01$) [for deaf students able to speak]; ($\chi^2 = 8.22$, $df = 2$, $p < .02$) [for deaf students unable to talk]). (See Tables 13 and 14, Chapter III).

CHAPTER V

APPLICANTS TO HIGHER INSTITUTIONS OF LEARNING

The preceding chapter has been concerned with admissions policies of higher institutions of learning in which the essential policy control comes from admissions departments. This chapter will deal with the characteristics of the institutions of higher learning which have had deaf applicants.

Again, tuition level appears to be a factor. As indicated in Table 33 30, high tuition schools (greater than \$1,400) have had more deaf students apply. The higher application rate at the more expensive schools might be interpreted as

Table 33
Higher Institutions Of Learning With Deaf Applicants And
Tuition Level

	<u>\$1,400 or less</u>	<u>More than \$1,400</u>	<u>Total</u>
Have had deaf applicants	20	13	33
Did not have deaf applicants	<u>72</u>	<u>13</u>	<u>85</u>
Total	92	26	118

Yates Chi Square = 6.7, df = 1, p .01

possible parental expectation that the higher tuition colleges and universities accepting the deaf student can afford to make more available the means for education. This hypothesis was partially supported by a trend in the expected direction for the relationship between faculty-student ratio and tuition.

It was also found that institutions which award advanced degrees (Master's and doctorates) had more deaf applicants than those schools which are confined to a bachelor's degree or less (see Table 34). First, institutions which grant

Table 34

Applicants to Higher Institutions of Learning And Level
Of Degree Granted

	<u>Bachelor's or less</u>	<u>Advanced Degree</u>	<u>Total</u>
Have had deaf applicants	15	18	33
Did not have deaf applicants	62	27	89
Total	<u>77</u>	<u>45</u>	<u>122</u>

Yates Chi Square = 5.1, df = 1, $p < .05$

the higher degrees are more prestigious. Secondly, the colleges which grant the higher degrees are large enough in student size and have the facilities and faculty to serve the deaf better. Tables 35, 36, and 37 support these relationships.

Table 35

Highest Degree And Number of Day Students

	<u>Bachelor's or less</u>	<u>Advanced Degree</u>	<u>Total</u>
1,000 or less day students	59	16	75
More than 1,000 day students	13	33	46
Total	<u>72</u>	<u>49</u>	<u>121</u>

Chi Square = 30.07, df = 1, $p < .001$

Table 36

<u>Degree Awards and Physical Facilities</u>			
	<u>Bachelor's or less</u>	<u>Advanced Degree</u>	<u>Total</u>
10 or less buildings	52	16	68
More than 10 buildings	34	42	76
Total	86	58	144

Chi Square = 15.04, df = 1, $p < .001$

Table 37

<u>Degree Awards and Faculty-Student Ratio</u>			
	<u>Bachelor's or less</u>	<u>Advanced Degree</u>	<u>Total</u>
1: (1-10)	13	11	24
1: (11-20)	33	34	67
1: (over 20)	21	2	23
Total	67	47	114

Chi Square = 12.7, df = 2, $p > .01$

Tables 38, 39, and 40 indicate that deaf students are more likely to apply to large schools in terms of physical facilities, size of day student population, and size of student resident population. It is, of course, natural that larger schools would always have more applicants than smaller schools. However, the data do show that as a group college eligible deaf applicants apply to the larger

schools rather than to smaller ones. Also, schools and colleges having curricula

Table 38

<u>Deaf Applicants And Number of Buildings</u>			
	<u>10 buildings or less</u>	<u>More than 10 buildings</u>	<u>Total</u>
Have had deaf applicants	7	26	33
Have not had deaf applicants	54	32	86
Total	61	58	119

Yates Chi Square = 14.9, df = 1, $p < .001$

Table 39

<u>Deaf Applicants And Size Of Student Body Day Students</u>			
	<u>1,000 or less</u>	<u>More than 1,000</u>	<u>Total</u>
Have had deaf applicants	14	18	32
Have not had deaf applicants	55	24	79
Total	69	42	111

Yates Chi Square = 5.4, df = 1, $p < .02$

Table 40

Number of Deaf Applicants And Size of School's Resident Population

	<u>500 or less</u>	<u>More than 500</u>	<u>Total</u>
Have had deaf applicants	16	17	33
Have not had deaf applicants	<u>61</u>	<u>22</u>	<u>83</u>
Total	77	39	116

Yates Chi Square = 5.5, df = 1, $p < .02$

allowing over 10% electives tend to have more deaf applicants than those having less (see Table 41). However, the data show that applications of deaf students

Table 41

Deaf Applicants And Degree Of Elective Freedom In Curriculum

	<u>10% or less</u>	<u>More than 10%</u>	<u>Total</u>
Have had deaf applicants	4	23	27
Have not had deaf applicants	<u>27</u>	<u>47</u>	<u>74</u>
Total	31	70	101

Yates Chi Square = 3.4, df = 1, $p < .07$

are not necessarily being made to colleges and universities with the lower faculty-student ratio ($\chi^2 = .48$, df = 2).

A profile of the higher institutions to which deaf students apply begins to emerge. It is a larger, more expensive university which grants advanced degrees. Advanced degree schools were characterized by larger day student body, more buildings, and a better student-teacher ratio. However, it is often highly impersonal, bureaucratic, and, even to the non-handicapped student, at times confusing and anxiety-provoking. One would think that the deaf student would seek the shelter of the small "friendly" college. Yet, the closely knit student group of the small college and the realistic possibility of rejection by the student body may well be frightening to the deaf student. Since he would have strong feelings of inadequacy relative to his social skills, the demands of the close relationships in the small college could be traumatic. Moreover, the ability of the normal student in the small college to tolerate the emotional stress of relating initially to the deaf student without becoming unduly anxious and fearful is an important variable to consider. In the small college, once these obstacles are surmounted through counseling help, the close student relationships could, in theory, be most beneficial to the deaf student, both from the standpoint of emotional and educational growth and development. In addition, deaf students apply to schools which have a higher degree of academic flexibility. This is understandable since certain courses become exceedingly difficult for the communication-impaired student. It is important to note that the deaf student's failure to consider faculty-student ratio indicates a gap in the educational counseling procedures carried on at the high school level. It is well known that the deaf student requires all the faculty help he can get to contribute to his successful college career.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The results of the study are summarized as follows:

1. Data indicated that only 34 of the 137 institutions of higher learning reported having had experience with deaf student applicants.
 - a) For deaf students who are able to talk the policies of the institutions of higher learning to which these students applied were overwhelmingly positive in their attitudes toward their acceptance. Moreover, the large majority of these schools reported having had accepted and enrolled at least one deaf student (some, as many as five) during the past five years. Further, half of the institutions which had accepted and enrolled at least one able to talk deaf student graduated at least one such student.
 - b) For the unable to talk deaf student the outlook is considerably more pessimistic. Of the institutions of higher learning which have had deaf students apply, less than half reported positive admissions policies toward unable to talk deaf students. Moreover, only two schools reported having had accepted and enrolled at least one unable to talk deaf student in the past five years. Finally, only one institution of higher learning which had accepted and enrolled at least one unable to talk deaf student graduated but a single unable to talk deaf student.
 - c) When characteristics of higher institutions (e.g. cost of tuition, size of faculty, student body, physical facilities, etc.) were examined in relation to their accepting or rejecting those deaf students (either able or unable to talk) who applied, no differences were observed. The most frequently given reasons for

rejection were: inadequate academic records and inability of the institution to meet the special needs of the deaf student.

2. Almost one quarter and nearly one half of the institutions of higher learning reported negative admissions policies toward the able to talk and unable to talk deaf student, respectively. Certain characteristics of these institutions were found to be related to admissions policies.

- a) Institutions reporting positive (or at least not negative) admissions policies toward both able and unable to talk deaf were characterized in a general way by the following: coed status, non-four year program, and non-religious sponsorship.
- b) Institutions reporting positive (or at least not negative) admissions policies toward the able to talk deaf only were characterized in a general way by the following: greater proportional choice of electives and greater physical facilities in terms of number of buildings.
- c) Institutions reporting positive (or at least not negative) admissions policies toward the unable to talk deaf only were characterized in a general way by the following: no resident students and the granting of advanced degrees.
- d) In general deaf students are applying to a significantly greater extent to higher institutions of learning which have positive admissions policies toward the acceptance of both able and unable to talk deaf than to institutions which have "no policy" or negative policies toward their acceptance.
- e) Although collocational institutions generally evidenced positive (or at least not negative) admissions policies toward the acceptance of both able and unable to talk deaf students, the

non-coeducational institutions were found to be more desirable in terms of faculty-student ratio and physical facilities. Non-four-year institutions were shown to be more accepting of both able and unable to talk deaf students; they offer the better faculty-student ratios, but less freedom in curriculum choice. The non-residency schools, although more accepting of unable to talk deaf students, must be considered less desirable in terms of the poorer facilities and faculty-student ratio which they offer; furthermore, possible social benefits resulting from involvement in campus life may be quite limited at such non-residence institutions.

3. The deaf student was shown to be applying to higher institutions of learning which were characterized by the following: higher tuition schools, schools which offer advanced degrees and a greater choice of curriculum electives, schools which are larger in size, in terms of physical facilities and day student body, and schools which provide residential accommodations for their students.

- a) To examine these characteristics individually, one will recall that amount of tuition and size of day student body were found to be unrelated to admissions policies toward both able to speak or unable to speak deaf students.
- b) Further, institutions which offer the greater physical facilities and choice of electives evidenced the more positive admissions policies toward the able to talk deaf student (no difference with respect to the unable to talk).
- c) Finally, institutions which offer degrees beyond that of the Bachelor's were shown to have "no policy" toward the admission of unable to talk deaf students (for the able to talk, there were no differences in policy according to degree granted).

- d) Five of the six characteristics of institutions to which the deaf are applying, then, either bore no relationship to admissions policies or were related to non-negative policies. However, institutions which provide residence facilities for their students and to which the deaf student is applying were shown to have a definite negative policy toward the admission of deaf students who are unable to talk.

It is possible, therefore, and indeed feasible for some . . . lly deaf students to successfully attend and complete college in an institution of higher learning with students of normal hearing ability. It is true that the educational and verbal deficit from which the deaf high school student suffers poses an obstacle to college matriculation. However, the data showed that this obstacle is not insurmountable. This does not mean lowering standards. It does mean psychosocial acceptance, flexibility in curriculum and tutorial facilities which in many cases are also extended to the non-handicapped students as well. Some deaf students can attend college without extensive extra help. Others, on the other hand, will require much.

Many institutions in the sample were highly sympathetic with the plight of the deaf student and wanted to help, but a number felt themselves unequipped to deal with the educational problems of the deaf student. Psychosocial problems, although not mentioned by admissions officers, are known to be an important factor in college adjustment. It appeared from comments made by admissions personnel that there is a definite lack of knowledge about the characteristics of deafness and the problems of the deaf student. The potential of the deaf student for a college education in a college or university with normal students is not completely recognized by admissions officers.

The question arises as to where the deaf students should be applying for admission to higher institutions of learning. Naturally, it is advisable that they apply to colleges which best meet their educational and psychosocial needs. Nevertheless, probability of acceptance should be considered. It appears that there is a definite lack of realistic counseling for the deaf student on the high school level. Written comments by admissions officers show that deaf students applying for admission have unrealistic educational goals relative to their abilities or are unduly anxious or timorous. In a study of attitudes of parents of deaf high school students (17) it was learned that the deaf student contemplating college is frequently influenced by the social and emotional needs of his parents and has been unable to arrive at an objective assessment of the situation.

There is a definite need for communication between college educators and specialists working with the deaf. In view of the results of this study, the authors advance the following recommendations:

1. That a national liaison committee be established consisting of deans of admission and leading educators of the deaf. This committee would meet regularly so that educators of the deaf could carry on a continuing process of interpretation of the needs of the deaf student to knowledgeable and influential officials of colleges and universities. The colleges and universities, on the other hand, would be in a position to elucidate their problems with deaf students and to make concrete and valuable suggestions concerning the guidance and preparation of the deaf student for attendance at a normal hearing college.
2. That the national organizations serving the deaf take the responsibility for conducting periodic but regular seminars or institutes

for deans and other key individuals in the field of higher education. The purposes of such groups would include acquainting educators with both the problems and the potential of the deaf student.

3. That experimentation take place for purposes of ascertaining the feasibility and merits of establishing a special counseling facility for deaf students attending normal hearing colleges. Such a facility would utilize individual and group counseling techniques aimed at providing both academic guidance and available help with psychosocial adjustment. This specially designed counseling facility would work closely with high school educators and guidance counselors in selecting deaf students with good college potential and would also act to interpret and clarify the problems which the deaf student was undergoing to faculty and other college personnel with whom the student would come into contact.
4. That a national evaluation team be established to ascertain the capacity of colleges to make such modifications in curriculum and educational procedure as would enable the deaf student to attend. This team would serve in an advisory capacity, not only in the area of integrating the deaf student as part of the normal college population, but also would fulfill a consultation function in helping the particular college or university obtain the necessary financial wherewithal to make modifications and serve the deaf student.

APPENDIX A

NEW ENGLAND REHABILITATION RESEARCH INSTITUTE

Northeastern University

Boston, Massachusetts

INSTRUCTIONS:

Please answer these questions to the best of your knowledge. For the purpose of this study, "deaf" means unable to hear at all (no residual hearing); "able to talk" means that verbal communication is adequate; and "unable to talk" means that verbal communication is unintelligible.

If there are any other divisions of your institution to which you feel this questionnaire may also apply please list the name and location so that we may send them a form.

PART I

1. Your name _____
2. What is the position you hold in your educational setting?
 - () a. Director of admissions
 - () b. Admissions counselor
 - () c. Guidance counselor
 - () d. Other (identify) _____
3. Is your institution considered a
 - () a. University
 - () b. Liberal arts college
 - () c. Junior college
 - () d. Professional school
 - () e. Other (identify) _____
4. How large is your institution?
 - a. Number of buildings _____
 - b. Number of day students _____
 - c. Number of evening students _____
 - d. Number of students residing on campus _____
 - e. Number of full time faculty _____
 - f. Number of part time faculty _____
5. Does your institution have more than one campus?
 - () Yes
 - () No

If so, how many? _____

6. Is your institution sponsored by any particular religious group?

() Yes

() No

If so, please identify. _____

7. What is the cost of tuition?

- () a. \$500 or below
- () b. \$501 to \$900
- () c. \$901 to \$1400
- () d. \$1401 to \$2000
- () e. Above \$2000

8. Approximately what percent of the curriculum is elective? _____

9. What is the highest degree granted by your institution?

- () a. Associate's
- () b. Bachelor's
- () c. Master's
- () d. Doctorate

10. Is your institution

- () a. All male
- () b. All female
- () c. Coeducational

11. Does your institution have a formalized work-study or cooperative plan whereby students are able to earn part or all of tuition?

() Yes

() No

If so, does it cover

- () a. A few departments
- () b. Many departments
- () c. All departments

12. Does the admission policy of your institution allow the acceptance of deaf students who are able to talk?

() Yes

() No

If not, please explain.

13. Does the admission policy of your institution allow the acceptance of deaf students who are unable to talk?

() Yes

() No

If not, please explain.

14. Have any deaf students applied for admission to your institution during the past five year?

() Yes

() No

If so, how many

- a. Have applied? _____
 b. Were accepted? _____
 c. Were rejected? _____

15. What was the major reason for the rejection of any deaf applicants?

- () a. Academic record not adequate
 () b. Personality such that emotional adjustment would be difficult
 () c. Did not feel that your institute could adequately meet their needs (please explain)
 () d. Other (please explain)

If deaf students are now or have been enrolled, please continue with PART II of this questionnaire.

PART II

1. What is the number of deaf students who are able to talk that have been enrolled during the past five years? _____
2. What is the number of deaf students who are unable to talk that have been enrolled during the past five years? _____

3. Of the number of deaf students who are able to talk, how many came from
- Secondary schools with normal hearing students? _____
 - Secondary schools for the deaf? _____
4. Of the number of deaf students who were unable to talk, how many came from
- Secondary schools with normal hearing students? _____
 - Secondary schools for the deaf? _____
5. Of the deaf students able to talk who attended your institution, how many
- Graduated? _____
 - Withdrew at the advice of the institution? _____
 - Dropped out of their own accord? _____
6. Of the deaf students unable to talk who attended your institution, how many
- Graduated? _____
 - Withdrew at the advice of the institution? _____
 - Dropped out of their own accord? _____
7. Of the deaf students you know about, how many
- Appeared isolated? _____
 - Appeared socially well adjusted? _____
 - Participated in extracurricular activities? _____
8. Has the institution ever modified any programs or curricula to accommodate deaf students?
- () Yes () No

9. Are counseling services available to students?

() Yes

() No

If so, who does the counseling?

- () Psychologists
- () Guidance counselors
- () Social workers
- () Other (identify)

10. Do you feel that special counseling is necessary for deaf students?

() Yes

() No

11. If you have any comments about this questionnaire or if you would like to express any ideas relating to the education of deaf students in normal college settings, we would be very grateful if you would write them down here.

APPENDIX B

NORTHEASTERN UNIVERSITY

BOSTON, MASSACHUSETTS 02115

NEW ENGLAND REHABILITATION RESEARCH INSTITUTE
OFFICE OF THE RESEARCH DIRECTOR

Dear Sir:

We are requesting your cooperation in a study of the problems of deaf students attending college in an educational setting with hearing students. On the basis of our findings, we hope to be able to make recommendations which will be of value to colleges in serving the deaf student. Also we hope to be able to make suggestions to the Vocational Rehabilitation Administration of the Department of Health, Education, and Welfare concerning the creation of new facilities to deal with the problems of educating the deaf student in college settings with normal hearing students.

We have endeavored to make this questionnaire as brief as possible. If you are able to give approximately a half hour of your time to complete it, you would be participating in the resolution of what is now a most difficult problem. We realize that you may not be the person who has all the required information. However, we would greatly appreciate your routing this questionnaire to the appropriate person in your institution.

The New England Rehabilitation Research Institute, which is conducting this study, is sponsored by Northeastern University and the federal government's Vocational Rehabilitation Administration. This questionnaire is part of a larger study. In approximately one year the entire study will be complete, and we would be very happy to make our findings available to you.

This questionnaire is being sent to all colleges and universities in New England.

Thank you.

Sincerely,

George J. Goldin, Ph.D.
Director of Research
Associate Professor of
Social Science

62

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Questionnaire

REFERENCES

1. Babbidge, H. D. Education of the Deaf (A report to the Secretary of Health, Education and Welfare by his Advisory Committee on Education of the Deaf) U.S. Dept. of Health, Education, and Welfare, Office of the Secretary, Washington, D. C., 1965, xxvi-xxvii.
2. Bigman, S. K. The deaf in American institutions of higher education. Personnel Guidance J., 1961, 39, 743-746.
3. Breunig, H. L. An analysis of a group of deaf students in colleges with the hearing. Volta Rev., 1965, 67(1), 17-27.
4. Detmold, G. E. American higher education of the deaf. In Proceedings of the international congress on education of the deaf and of the forty-first meeting of the convention of American instructors of the deaf, Washington, D. C.: U.S. Government Printing Office, April 1964. Senate Document No. 106, 1031-1034.
5. Goldin, G. J., Margolin, R. J. & Stotsky, B.A. The use of a regional rehabilitation counseling facility specially designed to meet the needs of deaf students attending college as part of a student body with normal hearing. Proposal for planning project RD-1831-S-66, Vocational Rehabilitation Administration, Washington, D. C. From Northeastern University: Boston, Mass.
6. Is there really any point in talking about higher education for deaf youngsters in colleges for the hearing? Volta Rev., 1965, 67(9), 616.
7. Klinghammer, H. D. Social perception of the deaf and blind by their voices and their speech. In Proceedings of the international congress on education of the deaf and of the forty-first meeting of the convention of American instructors of the deaf, Washington D.C.: U.S. Government Printing Office, April 1964, Senate Document No. 106, 615-618.
8. Levine, Edna S. The psychology of deafness: Techniques of appraisal for rehabilitation. New York: Columbia University Press, 1960.
9. Lunde, A. S., & Bigman, S. K. Occupational conditioning among the deaf. Washington, D. C.: Gallaudet College & National Association of the Deaf, 1959.
10. Myklebust, H. R. Toward a new understanding of the deaf child. Amer. Ann. Deaf, 1953, 98, 345-357.
11. Myklebust, H. R., Neyhus, A. & Mulholland, A. M. Guidance and counseling of the deaf. Amer. Ann. Deaf, 1962, 107, 370-415.
12. Myklebust, H. R., Psychological effects of deafness. Amer. Ann. Deaf, 1960, 105, 372-385.
13. New York State Psychiatric Institute, Dept. of Medical Genetics. Family and mental health problems in a deaf population. New York: Columbia University Press, 1963.

14. Olshansky, S. & Margolin, R. J. Rehabilitation as a dynamic interaction of systems. J. Rehabilit., 1963, 29(3), 17-18.
15. Proceedings of the international congress on education of the deaf and of the forty-first meeting of the convention of American instructors of the deaf. Washington, D. C.: U.S. Government Printing Office, April 1964.
16. Quigley, S. P. Jenne, W. C. & Phillips, Sondra B. Deaf students in colleges and universities, Alexander Graham Bell Association for the Deaf, Inc., Washington, D.C., 1968.
17. Stotsky, B.A., Margolin, R.J. & Goldin, G.J., A study of the feelings and attitudes of parents of deaf high school students regarding college attendance with normal hearing. Publication pending.