THE DEAF AND THE HARD-OF-HEARING IN THE OCCUPATIONAL WORLD

Report of a Survey Directed by the United States Office of Education

By

ELISE H. MARTENS

Senior Specialist in the Education of Exceptional Children

With the collaboration of

KENNETH BRALY
PERCIVAL HALL, Jr.
HELMER MYKLEBUST
SAM D. PALMER
ALICE F. ROWELL
ISABELLE WALKER

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FOREWORD

When Federal funds were made available under the Civil Works Administration for the employment of needy persons in the professional and technical classes on research projects of a statistical nature, the United States Office of Education was authorized to carry on an investigation related to the occupational possibilities of the deaf and the hard-of-hearing. Plans were immediately formulated under the general direction of the Assistant Commissioner of Education, advisory and cooperating committees were appointed, and field work was carried on during the first half of the year 1934.

When C. W. A. funds were no longer available, the Office of Education continued the analysis of the data with the generous cooperation of the President of Gallaudet College and his associates. Six students of that institution, who were of graduate standing and engaged in preparing themselves to be teachers of the deaf, assisted with the statistical tabulations. The work of these students has been a material contribution toward the completion of the project, the final report of which is given in this bulletin.

The Office of Education expresses its deep appreciation to all who in any way contributed to the outcome of the study. The advisory committee gave helpful counsel. The services of Herbert E. Day, who assisted in the direction of the entire project, were invaluable. To the untiring efforts of 44 volunteer supervisors was due the success of the field service. Field workers carried their responsibilities well. Employers gave much helpful information. Cooperating organizations, such as leagues for the hard-of-hearing, alumni associations, church groups, fraternal organizations for the deaf, and other agencies either made up of or interested in the deaf and the hard-of-hearing, assisted in every possible way. The officials of Gallaudet College gave to the Office of Education and to their own graduate students the opportunity for cooperative service. The students themselves spent many days of laborious work in the statistical laboratory. The

editor of the *American Annals of the Deaf* made possible the publication of their preliminary reports in the pages of that periodical.

To all of these the Office of Education acknowledges its indebtedness, with the hope that the value of the findings herein presented may in some measure compensate for the effort expended. It is only through such investigations as this that light can be thrown upon some of the perplexing problems involved in the education of deaf and hard-of-hearing children. It is their right to become occupationally adjusted. It is our responsibility to guide them in that direction.

BESS GOODYKOONTZ,
Assistant Commissioner.

MEMBERS OF SURVEY STAFF

ELISE H. MARTENS, Senior Specialist in the Education of Exceptional Children, in charge of C. W. A. Project F90.
HERBERT E. DAY, Associate in charge of C. W. A. Project F90.

ADVISORY COMMITTEE

KATHERINE M. COOK, U. S. Office of Education.
BESS GOODYKOONTZ, U. S. Office of Education.
ELBERT E. GRUVER, Pennsylvania Institution for the Deaf.
PERCIVAL HALL, Gallaudet College.
JOHN A. KRATZ, U. S. Office of Education.
HOWARD MCMANAWAY, American Association to Promote the Teaching of Speech to the Deaf.
NORMAN MCMANAWAY, Volta Bureau.
BETTY WRIGHT, American Federation of Organizations for the Hard of Hearing.

FIELD SUPERVISORS

LLOYD E. BERG, Assistant Superintendent, Pennsylvania School for the Deaf, Mount Airy, Philadelphia, Pa.
CHARLES SCOTT BERRY, Ohio State University, Columbus, Ohio.
GORDON BERRY, M. D., Worcester, Mass.
IGNATIUS BJORLEE, Superintendent, State School for the Deaf, Frederick, Md.
J. W. BLATTNER, Superintendent, School for the Deaf, Sulphur, Okla.
ALFRED L. BROWN, Superintendent, Colorado School for the Deaf and Blind, Colorado Springs, Colo.
DANIEL T. CLOUD, Superintendent, Illinois School for the Deaf, Jacksonville, Ill.

SISTER MARY CONSTANTIA, Principal, Le Couteulx St. Mary's Institution for the Deaf, Buffalo, N. Y.

MARY R. COX, Principal, Alexander Graham Bell Oral School, Cleveland, Ohio.

FRANK M. DRIGGS, Superintendent, Utah School for the Deaf and the Blind, Ogden, Utah.

T. C. FORRESTER, Superintendent, Rochester School for the Deaf, Rochester, N. Y.

JOHN B. HAGUE, Chief, Special Schools Bureau, State Education Department, Albany, N. Y.

PETRA HOWARD, Department of Deaf, Minnesota Industrial Commission, St. Paul, Minn.

TRUMAN INGLE, Superintendent, Missouri School for the Deaf, Fulton, Mo.

JOHN J. LEE, Supervisor of Special Education, State Department of Public Instruction, Lansing, Mich.

BESSIE N. LEONARD, Principal, Clarke School for the Deaf, Northampton, Mass.

GEORGE B. LLOYD, Superintendent, Washington State School for the Deaf, Vancouver, Wash.

ARTHUR B. LORD, Supervisor of Special Classes, State Department of Education, Boston, Mass.

A. C. MANNING, Superintendent, Western Pennsylvania School for the Deaf, Pittsburgh, Pa.

O. S. MCINTIRE, Superintendent, Iowa School for the Deaf, Council Bluffs, Iowa.

HOWARD M. MCMANAWAY, Superintendent, School for the Deaf and the Blind, Staunton, Va.

H. J. MENZEMER, Superintendent, Kansas State School for the Deaf, Olathe, Kans.

ALICE METZNER, Director of Special Education, City Schools, Detroit, Mich.

CLARA E. NEWLEE, Head Teacher, Parker Practice Day School for the Deaf, Chicago, Ill.

MRS. H. T. POORE, Superintendent, Tennessee School for the Deaf, Knoxville, Tenn.

ALVIN E. POPE, Superintendent, New Jersey School for the Deaf, Trenton, N. J.

BESS M. RIGGS, Superintendent, Arkansas School for the Deaf, Little Rock, Ark.

OLIVE S. RODGERS, Head Teacher, Denver Day School for Deaf Children, Denver, Colo.

BEN SCHOWE, Akron, Ohio.

CLARENCE J. SETTLES, President, Florida School for the Deaf and the Blind, St. Augustine, Fla.

IRENE T. SHORT, Principal, Los Angeles School for the Deaf and Hard of Hearing, Los Angeles, Calif.

VICTOR O. SKYBERG, Superintendent, New York School for the Deaf, New York, N. Y.

STELLA STILLSON SLAUGHTER, Milwaukee State Teachers College, Milwaukee, Wis.

J. LYMAN STEED, Superintendent, Oregon State School for the Deaf, Salem, Oreg.

ELWOOD A. STEVENSON, Principal, California School for the Deaf, Berkeley, Calif.

J. H. STONE, Superintendent, Mississippi School for the Deaf, Jackson, Miss.

MARIA P. TEMPLETON, Head Teacher, Seattle School for the Deaf, Seattle, Wash.

E. S. TILLINGHAST, Superintendent, South Dakota School for the Deaf, Sioux Falls, S. Dak.

MONSEIGNOR H. J. WALDHAUS, Superintendent, St. Rita School for the Deaf, Lockland, Cincinnati, Ohio.

W. LAURENS WALKER, Superintendent, South Carolina School for the Deaf and the Blind, Cedar Springs, S. C.

LAVILLA WARD, Supervisor of Deaf, Blind, and Defective Speech, State Department of Public Instruction, Madison, Wis.

FRANK R. WHEELER, Principal, American School for the Deaf, West Hartford, Conn.

OLIVE WHILDIN, Supervisor of Special Education, Public Schools, Baltimore, Md.

CHAPTER 1: INTRODUCTION

THE SURVEY to determine occupational opportunities for the deaf and the hard-of-hearing was conducted as an approved Federal project under the Civil Works Administration. It was planned and directed by the United States Office of Education, through which the findings are now being published.[1]

PURPOSE OF THE SURVEY

The project was conceived primarily as a study related to the vocational guidance of deaf and hard-of-hearing young people. If handicapped children are to be helped to realize their greatest potentialities occupationally, one must know in which types of occupations handicapped adults are now most successfully engaged. One must knew, too, the relationship of success in a given occupation to other factors, such as degree of deafness, command of speech, and education. These items must be coupled with a knowledge of the pupil as a person—his individual capabilities and interests, his temperament, and his emotional equipment. Thus an adequate guidance program looking toward vocational self-realization takes into consideration, on the one hand, the individual's assets and liabilities, and, on the other hand, the world of employment in which he must find a place.

Some occupational studies related to the deaf and the hard-of-hearing have beenm ade[2] by other investigators, but in the present survey it has been possible to utilize a larger sampling than those which have hitherto been available, and at the same time the statistical analysis has included a consideration of certain factors not previously investigated. It is believed, therefore, that the findings of the study should have some significance in relation to the education of the deaf and the hard-of-hearing. If the schools are to give intelligent guidance for vocational activities, they must adjust their curricula to conditions as they are,

[1] A preliminary report has appeared in the *American Annals of the Deaf*, 80: 116-142; 200-242; 342-366; 395-407, March, May, September, November, 1935.

[2] These are listed in the bibliography on p. 93.

not as they have been in the past nor yet as educational leaders would like to see them. This applies to the education of hearing and non-hearing alike.

ORGANIZATION OF THE SURVEY

Areas served.—In order to show clearly the extent of the project, figure 1 is presented indicating the headquarters of supervisors in the respective States served. Owing to the limitation of funds, some selection of territory was necessary. Twenty-seven States and the District of Columbia were designated on the basis of census population of the deaf, geographical location, availability of supervisory service, and other pertinent factors. The States included were: Arkansas, California, Colorado, Connecticut, Florida, Illinois, Iowa, Kansas, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, Washington, and Wisconsin. Figure 1 shows how widely these States are distributed from the Atlantic to the Pacific coast and from the northern to the southern border. Several other States in the North, West, and South central regions had been included in the original plans, but curtailment of funds made it necessary to eliminate them before work had actually begun. It is to be regretted that this elimination took out of the picture some of the agricultural areas of the country, owing to the difficulty of making contacts in these sparsely settled regions.

It was not the object of the survey to make an exhaustive enumeration of deaf and hard-of-hearing adults in the country nor even in those States in which the investigation was carried on, but rather to secure a sampling of those adults who were or had been employed that was large enough to show definite trends. Hence strategic points were selected in the several States which might be the centers of activity for the surrounding territory. These are indicated in figure 1.

Supervisory service.—Since the field workers who were to do the actual enumeration were to be taken from the rolls of the unemployed and had not necessarily had any previous contact with deaf and hard-of-hearing people, there arose

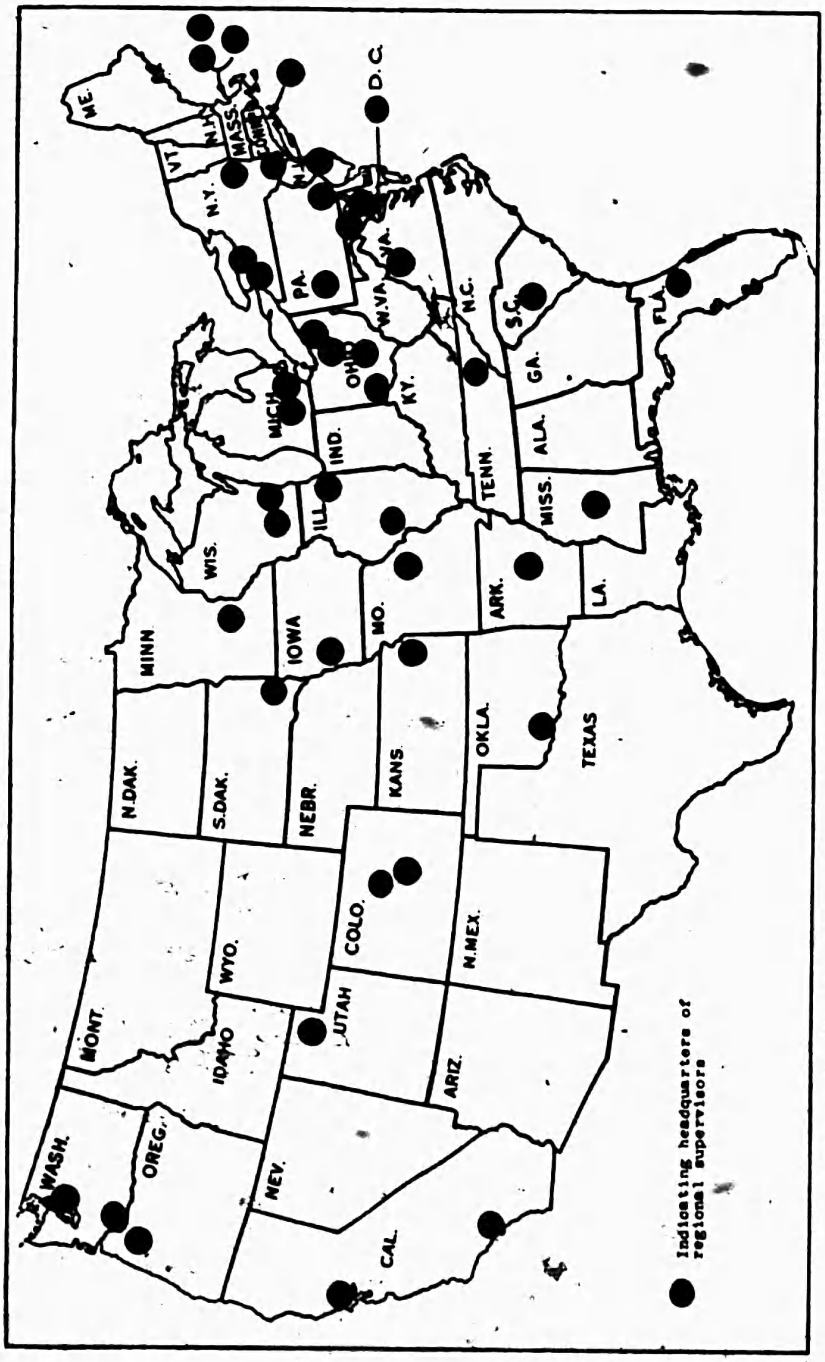

FIGURE 1.—Showing regions served by the CWA Survey for the Deaf and the Hard-of-Hearing.

the need of providing expert supervision of their activities. There is no one who can more intelligently approach a problem of this kind or who is more keenly interested in its solution than the person whose work brings him into active relationship with the deaf and the hard-of-hearing, such as a school administrator or teacher, an otologist, or an individual in some other related capacity. Hence, it was to this group that the Office of Education looked for help, and it was this group that responded most generously with services rendered on an absolutely voluntary basis.[3] To each supervisor was assigned a territory, centering about his own immediate place of activity. To each one, also, was allotted a given number of field workers who were to be selected, on the basis of qualifications specified by the Office of Education, from the rolls of the United States Employment Service and who were to be paid by the Civil Works Administration for the period of their service.

The 44 supervisors serving on the project constituted the intermediary officers between the Office of Education and the field workers. They received all instructions from Washington and interpreted these to their workers. They checked all questionnaires filled in and reports of work done by the field workers and sent them on to Washington. At the same time they also constituted the liaison officers between the field workers and the deaf and the hard-of-hearing from whom information was to be secured. Their familiarity with the channels of approach made their services invaluable in this direction. Alumni associations, leagues for the hard-of-hearing, church organizations, fraternal organizations for the deaf, and numerous other agencies contributed information and helped to make the necessary contacts. Through the cooperation of all of these the supervisors paved the way for the activity of the field workers.

Field service.—Three hundred and twenty-two field workers distributed among the respective areas interviewed the deaf and the hard-of-hearing, sought out their present or most recent employers for additional information, filled in the schedules prepared for the study, made weekly reports to their supervisors, and sent in all schedules to be checked

[3] The names of the supervisors are listed on pages VIII, IX, and X. Mr. Day, Associate in charge of the survey, also served as field supervisor for the District of Columbia.

and tabulated. Each was employed for approximately 6 weeks. Their connection with the project terminated when the schedules had been sent to the Office of Education for analysis.

The qualifications for these field workers, as suggested by the Office of Education, were as follows:

(a) May be either men or women, but should be predominantly women.[4]
(b) May be by previous occupation:
  (1) Teachers of the deaf or hard-of-hearing.
  (2) Teachers in regular schools.
  (3) Social workers.
  (4) Nurses.
  (5) Graduates of normal school or college, without placement.
  (6) Other qualified trained persons.
(c) May themselves be deaf or hard-of-hearing persons provided they have the ability to converse freely with employers to be interviewed. This is an important provision.
(d) Should have the ability to make friendly personal contacts and win the confidence of the person interviewed, in order to secure the necessary information.

The supervisors appreciated the need for having well-qualified persons at work on the project and did their utmost to secure them. That their efforts were reasonably successful is attested by the distribution of occupations represented in table 1. Every supervisor was asked to report to the Office of Education the major previous occupation of each field worker. This information was submitted for 286 of the 322 field workers appointed, and for these the previous occupations were distributed as in table 1. Almost 40 percent had been teachers—teachers in regular day schools, in classes or schools for the deaf, in private schools, or in the university. More than 18 percent had been either office executives or secretaries, accountants, or clerks. More than 11 percent had been nurses or social workers, and an equal number were recent college graduates who had not yet been placed. The remainder were distributed among various occupations, a large number of which were of professional or technical character.

[4] This stipulation was made at the request of the Civil Works Administration, since there seemed to be a scarcity of employment opportunities for women workers.

TABLE 1.—PREVIOUS OCCUPATIONS OF FIELD WORKERS EMPLOYED FOR SURVEY

Read the table as follows: Information concerning previous occupations was reported for 286 field workers. Of these, 110, or 39.1 percent, had been teachers; 43, or 15 percent, had been office secretaries, accountants, or clerks, etc.

Previous occupation	Number	Percent of total
All occupations reported	**286**	**100.0**
Teacher	110	39.1
Office secretary, accountant, clerk	43	15.0
Office executive	9	3.2
Nurse, social worker	32	11.2
College graduate without placement	32	11.2
Salesman (or woman)	8	2.7
Housewife	8	2.7
Printer	6	2.1
Interpreter	5	1.7
Draftsman, commercial artist	5	1.7
Minister, religious educator	4	1.4
Engineering executive	3	1.0
Occupational therapist	3	1.0
"Never employed"	3	1.0
Reporter	2	.7
Chemist	2	.7
Tailor	2	.7
Census enumerator	2	.7
County assessor, county supervisor	2	.7
Physician	1	.3
Steward (in school for deaf)	1	.3
Machinist	1	.3
Railroad worker	1	.3
Expert in candy factory	1	.3

Certain other information concerning these workers was volunteered by some of the supervisors, but since it was not uniformly submitted, the data can be considered only fragmentary. One hundred and thirteen field workers were reported as college graduates with a bachelor's or master's degree, and a few with even a doctor's degree. One hundred and eight of them were reported as having had extensive contacts with the deaf, and 46 were reported as being deaf or hard-of-hearing themselves. If these data were available for all of the workers, it is reasonable to suppose that each of the figures would be increased. It is gratifying to know that so large a proportion of those employed for a project involving the deaf and the hard-of-hearing were already familiar with their needs, and that about 15 percent of the places could be filled by deaf and hard-of-hearing persons. If these facts are coupled with the high percentage of

college graduates and with the large proportion of professional and technical workers engaged, it would seem that on the whole the work of the field agents should be reasonably accurate.

The inquiry forms.—Two types of schedules were prepared, one designed to secure information from the deaf or hard-of-hearing person himself, the other to be used with those employers who could be reached, with the consent of the deaf or hard-of-hearing employee. These schedules are reproduced on pages 7–12. It will be noted that Schedule I asks for (1) data concerning employment history and (2) personal data including educational history, degree of deafness, lip-reading ability, and other pertinent items. Schedule II duplicates a few of the elements contained in Schedule I (such as employment status, type of occupation, and salary) and adds other items which only the employer could answer. The duplication of certain questions in the two forms afforded opportunity to make interesting comparisons between the data given by the employee and by the employer. The findings showed a high degree of consistency.

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, January 2, 1934.

A SURVEY TO DETERMINE POSSIBILITIES OF PLACEMENT IN PUBLIC WORKS AND CIVIL WORKS FOR THE DEAF AND HARD-OF-HEARING

Name of supervisor .....
Name of field worker .....
Date of interview .....

SCHEDULE I

To be filled in for each deaf or hard-of-hearing person interviewed. In every case encircle the number before the right answer or (where blanks are provided) write the correct answer. Encircle *one* and *only one* answer in *each* group.

....
(Name) (Post office address) (State)

Is this person willing to have his employer interviewed? Yes No (encircle one).

A. Employment Data

NOW EMPLOYED?

1. Yes.
2. No.

IF NOT EMPLOYED, HOW LONG UNEMPLOYED?

3. Less than 1 year.
4. 1 to 2 years.
5. 2 to 3 years.
6. More than 3 years.

IF NOT EMPLOYED, REASON FOR UNEMPLOYMENT?

7. Reduction of force.
8. Moved out of town.
9. Shop closed.
10. Handicap of hearing defect.
11. Other _____
(Give reason)

PRESENT OR MOST RECENT OCCUPATION

12. General occupation _____
13. Specific job _____

NAME AND ADDRESS OF PRESENT OR MOST RECENT EMPLOYER

14. _____
_____

BUSINESS OF EMPLOYER

15. _____

HOW LONG IN PRESENT OR MOST RECENT POSITION?

16. Less than 1 year.
17. 1 to 2 years.
18. 2 to 3 years.
19. More than 3 years.

AVERAGE WEEKLY EARNINGS DURING PRESENT OR MOST RECENT EMPLOYMENT (If room, lodging, house rent, board, or laundry is part of weekly earnings, include them in estimated value checked)

20. Less than $10.
21. $10 to $19.
22. $20 to $29.
23. $30 to $39.
24. $40 to $49.
25. $50 or more.

REGULARITY OF WORK DURING PRESENT OR MOST RECENT EMPLOYMENT

26. Permanent, full time.
27. Permanent, part time.
28. Seasonal, full time.
29. Seasonal, part time.
30. Temporary, full time.
31. Temporary, part time.

SELF-RATING OF SUCCESS IN PRESENT OR MOST RECENT POSITION

32. Failing.
33. Moderate; "Getting by."
34. Succeeding fairly well.
35. Succeeding very well.

EXPERIENCE JUST PREVIOUS TO PRESENT OR MOST RECENT POSITION

36. General occupation _____
37. Specific job _____

LENGTH OF TIME IN POSITION NOTED IN 36 AND 37 ABOVE

38. Less than 1 year.
39. 1 to 2 years.
40. 2 to 3 years.
41. More than 3 years.

WAS THIS EMPLOYMENT REASONABLY CONTINUOUS?

42. Yes.
43. No.
44. Reason for change _____

B. Personal Data

AGE AT PRESENT

1. 16 to 19.
2. 20 to 29.
3. 30 to 39.
4. 40 to 49.
5. 50 to 59.
6. 60 to 69.

RACE

7. White.
8. Negro.
9. Oriental.
10. Other _____
(Give type)

NATIVITY

11. Native born of American parents.
12. Native born of foreign parents.
13. Foreign born.

SEX

14. Male.
15. Female.

NUMBER OF DEPENDENTS

16. None.
17. 1 or 2.
18. 3 or 4.
19. More than 4.

MODE OF LIVING

20. With immediate family.
21. With other relatives.
22. With other deaf or hard-of-hearing people, not relatives.

MEMBERSHIP IN A TRADE UNION

23. Yes.
24. No.

MEMBERSHIP IN FRATERNAL OR OTHER SOCIAL ORGANIZATION OF THE DEAF OR HARD-OF-HEARING

25. Yes.
26. No.

MEMBERSHIP OR AFFILIATION IN A RELIGIOUS ORGANIZATION

27. Yes.
28. No.

CAUSE OF DEAFNESS

29. Unknown.
30. Congenital.
31. Following illness.
32. Following operation.
33. Accidental injury to ear.
34. Other cause _____
(Give cause)

AGE WHEN DEAFNESS WAS FIRST NOTICED

35. Infancy (under 2 years).
36. Childhood (2 to 12 years).
37. Adolescence (12 to 18 years).
38. Adulthood.

ONSET OF DEAFNESS

39. Sudden.
40. Gradual.

OTHER SERIOUS PHYSICAL DEFECTS

41. Blind or partially blind.
42. Crippled.
43. Other _____
(Give defect)

DEGREE OF DEAFNESS

44. Can understand loud speech without earphone.
45. Can understand loud speech with earphone only.
46. Cannot hear speech at all.

LIP-READING ABILITY

47. None at all.
48. Very limited.
49. Enough to understand conversation.

MOST USUAL MEANS OF COMMUNICATION WITH SUPERIOR OFFICER (Employer, foreman, etc.)

50. By spoken language.
51. By signs, gestures, or manual alphabet.
52. By writing.

EFFECT OF DEAFNESS UPON SUCCESS IN WORK

53. None at all.
54. Slight hindrance.
55. Great hindrance.

HIGHEST GRADE OF SCHOOL WORK COMPLETED OR PARTIALLY COMPLETED (Encircle *only* HIGHEST LEVEL ATTAINED)

56. Elementary.
57. Junior high.
58. Senior high.
59. Junior college.
60. College or university.

ATTENDANCE AT SCHOOL FOR DEAF

61. Yes.
62. No.
63. If yes, state number of years _____

TRADE TRAINING

64. None.
65. In general public high or trade school.
66. In school for deaf.
67. Principal occupation for which trained in school____
_____
68. Other occupations for which trained in school _____
_____
_____
_____

WERE TRADES ACQUIRED IN SCHOOL SAME AS THOSE FOLLOWED LATER?

69. Yes, altogether.
70. To a large extent.
71. To a small extent.
72. Not at all.

REHABILITATION TRAINING?

73. Yes.
74. No.
75. If yes, in what trade _____

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, January 1934.

A SURVEY TO DETERMINE POSSIBILITIES OF PLACEMENT IN PUBLIC WORKS AND CIVIL WORKS FOR THE DEAF AND HARD-OF-HEARING

Name of supervisor_____
Name of field worker_____
Date of interview_____

SCHEDULE II

To be filled in by field worker for *present or most recent employer* of each deaf or hard-of-hearing person *who is willing to have his employer interviewed.* In every case encircle the number before the right answer or (where blanks are provided) write the correct answer. Encircle *one* and *only one* answer in each group.

(Name of deaf or hard-of-hearing person)	(Address, street and number)	(City)	(State)
.....	.....	.....	.....

NAME AND ADDRESS OF EMPLOYER

1. .....

BUSINESS OF EMPLOYER

2. .....

GENERAL OCCUPATION OF DEAF OR HARD-OF-HEARING PERSON

3. .....

SPECIFIC JOB OF DEAF OR HARD-OF-HEARING PERSON

4. .....

NOW EMPLOYED?

5. Yes.
6. No.

IF NOT NOW EMPLOYED, GIVE DATE OF SEPARATION FROM POSITION

7. 1933.
8. 1932.
9. 1931.
10. 1930.
11. Previous to 1930.

LENGTH OF TIME IN POSITION

12. Less than 1 year.
13. 1 to 2 years.
14. 2 to 3 years.
15. More than 3 years.

AVERAGE WEEKLY EARNINGS

(If room, lodging, house rent, board, or laundry is part of weekly earnings, include in estimated value checked)

16. Less than $10.
17. $10 to $19.
18. $20 to $29.
19. $30 to $39.
20. $40 to $49.
21. $50 or more.

GENERAL EDUCATIONAL REQUIREMENTS FOR POSITION

(Encircle only highest level required)

22. None.
23. Elementary school.
24. High school.
25. College.

TRADE TRAINING REQUIRED FOR POSITION

26. None.
27. School trade training.
28. Apprenticeship.

EMPLOYER'S ESTIMATE OF SKILL IN OCCUPATION

29. Failing.
30. Moderate (getting by).
31. Succeeding fairly well.
32. Succeeding very well.

PROSPECTS FOR PROMOTION

(If now employed)

33. None.
34. Fair.
35. Excellent.

IS (OR WAS) THE DEAFNESS OF THE PERSON EMPLOYED DETRIMENTAL TO HIS SUCCESS?

(Consider deafness alone as distinguished from the personality of the deaf person)

36. Yes.
37. No.
38. If yes, in what way?

MOST USUAL MEANS OF COMMUNICATION WITH SUPERIOR OFFICER (Employer, foreman, etc.)

39. By spoken language.
40. By signs, gestures, or manual alphabet.
41. By writing.

HOW MANY DEAF OR HARD-OF-HEARING PERSONS HAVE BEEN IN THE SERVICE OF THIS EMPLOYER DURING THE PAST FIVE YEARS?

42. 1 or 2.
43. 3 or 4.
44. 5 or 6.
45. 7 or 8.
46. 9 or 10.
47. More than 10.
48. Further comments of employer as to desirable training of deaf and hard-of-hearing for work in this particular plant:

---

49. Types of positions in plant that a deaf or hard-of-hearing person might fill:

Male	Female

Treatment of data.—All schedules were sent to the Office of Education, which assumed the responsibility for editing and coding.[5] Preparation of master tables was effected with statistical machines. The compilation and preliminary analysis of the data furnished in the master tables were the work of cooperating graduate students.[6] The present report utilizes extensively the contributions of these students and supplements them with a consideration of other important items.

[5] Herbert E. Day, who assisted with the organization and conduct of the entire survey, had immediate supervision of this part of the work.

[6] These were normally hearing students from Gallaudet College who, in the graduate division of that institution, were preparing themselves to become teachers of the deaf. Their contributions resulted in the articles that have appeared in the American Annals of the Deaf. (See p. 1, footnote.)

RELIABILITY OF DATA

Certain difficulties were encountered as the survey progressed. Conditions attendant upon the organization of an emergency administration designated to accomplish great ends in a short time were bound to affect efficiency of the field work. Schedules drawn up contained certain elements that may be termed subjective and liable to varying interpretations and response. Some deaf and hard-of-hearing persons were inclined to look upon the survey with suspicion and refused to give accurate information or any information at all, even though the assurance was given that all information would be treated as absolutely confidential. The field workers varied in their ability to make contacts and to win confidence. Hence in this study, as in every other investigation of its type, numerous factors are operative which might in the opinion of some throw the findings open to question.

On the other hand, the sampling was widely distributed over 27 different States and the District of Columbia. The 44 supervisors who volunteered their services were untiring in their efforts to iron out the difficulties encountered locally and to secure efficient work on the part of their field workers. The qualifications of the field workers as a group were high. The contents of the schedules were overwhelmingly objective, and those elements which were subjective have been treated accordingly. The data reported by both employees and employers were consistent to a gratifying degree; so also the data reported in various parts of the respective schedules. Finally, the sampling of deaf and hard-of-hearing numbered almost 20,000, and in the statistical treatment of a sampling as large as this it is usually considered that errors of report or of interpretation of report largely cancel one another. Therefore, the data secured through this investigation may be considered indicative of conditions as they actually were at the time of the survey, and offer the basis for making certain generalizations and offering certain suggestions for the consideration of those who are immediately responsible for the administration of education of the deaf and hard-of-hearing.

CHAPTER 2. GENERAL DESCRIPTION OF THE SAMPLING [1]

REFERENCE HAS already been made to the fact that the supervisors guided the field workers in their efforts to locate deaf and hard-of-hearing persons who were or had been employed. The purpose of the investigation was to make contacts with as many of these as it was possible to locate within the areas assigned. The result was a sampling of 19,580 persons, distributed among the various States as indicated in table 2. Of these, 13,251, or 67.7 percent, were men, and 6,329, or 32.3 percent, were women. Each of them either was employed at the time of the survey or had previously been employed.[2]

TABLE 2.—NUMBER OF PERSONS INCLUDED IN SURVEY (BY STATES)

State	Total	Men	Women
1	2	3	4
All States	**19,580**	**13,251**	**6,329**
Arkansas	270	207	63
California	1,284	752	532
Colorado	622	365	257
Connecticut	200	144	56
District of Columbia	152	84	68
Florida	312	197	115
Illinois	1,590	1,148	442
Iowa	354	243	111
Kansas	192	125	67
Maryland	415	306	109
Massachusetts	1,171	703	468
Michigan	2,443	1,886	557
Minnesota	667	377	290
Mississippi	409	338	71
Missouri	876	573	303
New Jersey	614	411	203
New York	2,416	1,564	852
Ohio	1,294	868	426
Oklahoma	493	358	135
Oregon	342	191	151
Pennsylvania	773	503	270
South Carolina	185	123	62
South Dakota	183	142	41
Tennessee	240	171	69
Utah	178	108	70
Virginia	701	477	224
Washington	414	296	118
Wisconsin	790	591	199

[1] This chapter was written with the collaboration of Isabelle Walker, a graduate student at Gallaudet College.

[2] Since the study was intended to be primarily a survey of types of employment in which deaf and hard-of-hearing can successfully be engaged, no schedules were included in the analysis that had been submitted for persons who had never been employed for wages.

Tables 3 to 12, inclusive, furnish data on certain items concerning these men and women about which inquiry was made. The picture which they give may be characterized as follows:

Age.—In the sampling is found a cross section of the deaf and hard-of-hearing population with respect to age. The figures for men and women taken together as well as for the men alone are largest for the years from 30 to 49 and taper off on either side of these limits. This is to be expected since the greatest number of wage earners is found in this period of life. It is also to be expected that women would show some variation from this trend. For them the largest proportion is found in the interval from 20 to 29 years, the figures beyond this no doubt being influenced by the occurrence of marriage and home responsibilities. (See table 3.)

Race and nativity.—An overwhelming majority of the sampling were of the white race, with a sprinkling of Negroes, Indians, and Orientals. (See table 4.) More than 90 percent were native born, and 68.1 percent were native born with one or both parents also native born. (See table 5.) It seems fair to assume, therefore, that the survey was carried on among a group of typical Americans handicapped by defective hearing.

TABLE 3.—AGE DISTRIBUTION OF SAMPLING

Age in years	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
16–19	313	1.6	167	1.3	146	2.3
20–29	3,913	20.0	2,413	18.2	1,500	23.9
30–39	4,351	22.3	2,857	21.6	1,494	23.8
40–49	4,309	22.1	2,853	21.5	1,456	23.2
50–59	3,568	18.3	2,459	18.6	1,109	17.6
60 or over	3,055	15.7	2,478	18.8	577	9.2
Total number reporting age [1]	19,509	100.0	13,227	100.0	6,282	100.0

[1] Although the total number of persons interviewed was 19,580, some of these failed to give data on one or another item. Hence, the "total number reporting", as given in this table and in succeeding tables, varies according to the number of replies that were available on the respective items.

TABLE 4.—RACE DISTRIBUTION OF SAMPLING

Race	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
White	19,143	97.8	12,948	97.8	6,195	97.9
Negro	411	2.1	286	2.1	125	2.0
Indian	20	.1	14	.1	6	.1
Oriental	2	------	1	------	1	------
Total number reporting race	19,576	100.0	13,249	100.0	6,327	100.0

TABLE 5.—DISTRIBUTION OF SAMPLING BY NATIVITY

Nativity	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Native born of native-born parentage	13,325	68.1	8,912	67.3	4,413	69.8
Native born of foreign parentage	4,358	22.3	2,898	21.9	1,460	23.1
Foreign born	1,876	9.6	1,430	10.8	446	7.1
Total number reporting nativity	19,559	100.0	13,240	100.0	6,319	100.0

Degree of hearing loss.—Approximately one-half of the persons included in the survey belong to the group usually termed "hard-of-hearing", if statements regarding their ability to hear are accurate. The use of instruments for the measurement of hearing disability was impossible because of the time and cost involved. Hence it was necessary to rely upon the individual's own statement supplemented by the field worker's knowledge of the situation. It seems clear, however, that we have in the sampling a generous representation of both "deaf" and "hard-of-hearing", as those terms are usually defined.[1] (See table 6.)

[1] For purposes of this survey, the term "deaf" refers to those who have a profound hearing disability; the term "hard-of-hearing" refers to those who hear with difficulty. The disagreement that has arisen with regard to the technical discrimination between these terms has no bearing upon this report.

TABLE 6.—DISTRIBUTION OF SAMPLING BY DEGREE OF HEARING LOSS

Degree of hearing loss	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Can understand loud speech without earphone	10,039	51.4	6,373	48.2	3,657	57.9
Can understand loud speech with earphone	1,009	5.0	609	4.6	400	6.3
Cannot hear speech at all understandingly	8,514	43.6	6,249	47.2	2,265	35.8
Total number reporting degree of hearing loss	19,553	100.0	13,231	100.0	6,322	100.0

Age at which hearing loss was first noticed.—The largest proportion (33.9 percent) of those who were interviewed lost their hearing after the age of 18. About 10 percent became deaf or hard-of-hearing between the ages of 12 and 18. With more than 30 percent the loss was first noticed in childhood between the ages of 2 and 12, and about 25 percent were either born deaf or became deaf in infancy. (See table 7.)

Means of communication with employer.—The means of communication used has an obvious relationship to the degree of deafness and to the age at which hearing was lost. Hence the figures given in table 8 should be considered in connection with those already cited in tables 6 and 7. More than 64 percent of those who responded said that they communicated with their employers or superior officers by spoken language, while 26 percent communicated by writing, and 9.6 percent used signs or the manual alphabet. These data seem reasonably consistent with those given in table 6, since it is to be expected (1) that the 56 percent who can understand speech either with or without an earphone would communicate by spoken language; and (2) that at least a limited proportion of those who were profoundly deaf could use speech through the retention of that which they had experienced before deafness came on, supplemented by training in speech and in lip reading. This second expectation is further strengthened by the fact (as shown in table 7) that about 43 percent of those interviewed first noticed a hearing loss

after maturity or during adolescence, and thus already had laid a firm foundation for the use of spoken language. Among those who became deaf before the age of 12 there must have been varying amounts of experience in speech and varying degrees of training and ability in its retention.

TABLE 7.—AGE AT WHICH HEARING LOSS WAS FIRST NOTICED

Age at which first noticed	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Adulthood (after 18 years)	6,617	33.9	4,423	33.5	2,194	34.8
Adolescence (12–18 years)	1,946	9.9	1,030	7.8	916	14.5
Childhood (2–11 years)	5,998	30.7	4,228	32.0	1,770	28.0
Infancy (under 2 years)	4,972	25.5	3,539	26.7	1,433	22.7
Total number reporting this item	19,533	100.0	13,220	100.0	6,313	100.0

TABLE 8.—MEANS OF COMMUNICATION WITH EMPLOYERS

Means of communication	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
Spoken language	12,417	64.3	7,791	59.6	4,626	74.0
Writing	5,049	26.1	3,910	29.9	1,139	18.2
Signs or manual alphabet	1,859	9.6	1,369	10.5	490	7.8
Total number reporting this item	19,325	100.0	13,070	100.0	6,255	100.0

Lip-reading ability.—Ability to read lips is another factor closely connected with the means of communication used by a deaf person. Yet it is recognized that the data available in the present survey on this item cannot be considered reliable because of their subjective nature. No tabulation is, therefore, presented. Suffice it to say that 40.5 percent of the total number of persons replying said that they had no ability whatever to read lips. Thirty-one and five-tenths percent claimed to have a limited ability, while 27.7 percent thought they had "enough to understand conversation."

Causes of hearing loss.—While the cause of deafness is not directly related to occupational activity, it is of interest in any study of a sampling of the deaf and hard-of-hearing population. Of those who reported on the question, 24.5 percent said they did not know the cause of their deafness and 11.3 percent stated that they were congenitally deaf. Since, as reported in table 7, 25.5 percent became deaf in infancy (below the age of 2 years), it seems probable that at least some of the 24.5 percent who listed the cause as unknown might really fall into the congenital class if their cases could be traced accurately. Illness, operation, or accidental injury to the ear accounted for by far the largest number of cases of hearing loss, 64 percent reporting such causes. (See table 9.)

TABLE 9.—CAUSES OF HEARING LOSS

Causes of hearing loss	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Cause unknown	4,691	24.5	3,077	23.2	1,614	25.6
Congenital	2,226	11.3	1,563	11.6	663	10.5
Following illness	10,117	51.4	6,657	50.3	3,460	54.8
Following operation	433	2.2	229	2.1	204	3.2
Accidental injury to ear	2,031	10.4	1,667	12.6	364	5.8
Old age	35	.2	29	.2	6	.1
Total number reporting this item	19,533	100.0	13,222	100.0	6,311	100.0

Education.—More than 12 percent of the total sampling had spent some time at college or university. Almost 38 percent had attended high school without, however, extending their education beyond that stage, and 48.9 percent had attended only the elementary school. Less than 1 percent of the total number said that they had never been at school. (See table 10). It is interesting to note that the educational achievement of the women as a group is distinctly higher than that of the men. Sixty and five-tenths percent of the former reached either high school or college, while only 45.7 percent of the latter attained either of these levels of education.

Attendance at a special school for the deaf (either day or residential) is likewise a significant factor. On this basis the

group is about equally divided, 47.2 percent having attended such a school for periods of time varying from 1 to 17 years. More than one-fifth had attended 10 years or longer, and almost two-fifths had attended 5 years or longer. (See table 11). The figure of 52.8 percent, representing those that did not attend a school for the deaf, is no doubt closely related to the percentage of 51.4 (given in table 6) representing those who said they could understand loud speech without an ear phone. It seems safe to assume that a large proportion of those who are "hard-of-hearing" but not "deaf" never enrolled in a school for the deaf. The difference between the percentages of men and women on these points seem quite consistent in the two tables.

TABLE 10.—HIGHEST LEVEL OF SCHOOL WORK REACHED

Highest level reached	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
College or university	2,487	12.8	1,450	11.0	1,037	16.5
High school	7,337	37.7	4,568	34.7	2,769	44.0
Elementary school	9,536	48.9	7,072	53.6	2,464	39.2
Never attended school	123	.6	100	.7	23	.3
Total number reporting this item	19,483	100.0	13,190	100.0	6,293	100.0

TABLE 11.—ATTENDANCE AT A SCHOOL FOR THE DEAF

Number of years attended	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
14–17	661	3.3	466	3.6	195	3.1
10–13	3,727	19.4	2,767	20.9	960	15.2
5–9	3,356	17.1	2,543	19.2	813	12.9
1–4	972	4.9	605	4.5	367	5.8
Attended, but time not given	487	2.5	305	2.4	182	2.9
Did not attend	10,350	52.8	6,553	49.4	3,797	60.1
Total number reporting this item	19,553	100.0	13,239	100.0	6,314	100.0

Occupational training.—Complete information on this item was not available. However, 11,096 persons reported some type of occupational training. Of these, 7,215, or 65 percent, said that such training had been received in a school for the deaf. The remaining 3,881 had taken their preparation in a general public high school, trade school, or higher institution of learning.

The extent to which such occupational training was followed in later life has a distinct bearing upon the quality of a program of vocational guidance. Less than one-third of those who reported on this item followed exclusively the occupation learned in school and considerably more than one-third did not follow it at all. The record is much more significant when men alone are considered, for of these only slightly more than a fourth followed exclusively the occupation for which they were trained in school, while more than 40 percent did not follow it at all. (See table 12.)

TABLE 12.—EXTENT TO WHICH OCCUPATIONAL TRAINING WAS FOLLOWED

Extent to which training was followed	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Altogether (exclusively)	3,064	30.2	1,862	26.9	1,202	37.1
To a large extent	1,650	16.3	1,011	14.7	639	19.7
To a small extent	1,635	16.1	1,125	16.3	510	15.8
Not at all	3,796	37.4	2,908	42.1	868	27.4
Total number reporting this item	10,145	100.0	6,906	100.0	3,239	100.0

SUMMARY

In this survey is a sampling of approximately 20,000 deaf and hard-of-hearing persons scattered among 27 different States and the District of Columbia. About two-thirds of them are men and one-third of them are women. They range in age from 16 to 70, but the middle 50 percent are found in the life period from about 30 to 50 years. Approximately one-half of them are profoundly deaf and the other half hard-of-hearing. Sixty percent use spoken language in communicating with their employers or superior officers.

Lip-reading ability is varied, from "none at all" to "enough to understand conversation." Fifty percent attended only the elementary school, the other 50 percent going on to high school, and 12 percent to college. A special school for the deaf was the avenue of education for approximately one-half of them. Occupational training received in either a school for the deaf or other institution was followed exclusively by 30 percent of those reporting any occupational training. By 37 percent the occupation learned at school was not followed at all. With this general description of the group we shall proceed to a more specific consideration of their employment status at the time of the survey.

CHAPTER 3: EMPLOYMENT STATUS OF THE SAMPLING [1]

OF THE 19,541 deaf and hard-of-hearing persons giving information on employment status, 10,497, or 53.7 percent, were employed at the time of the survey. Of these, 7,378 were men and 3,119 were women. This means that 9,044, or 46.3 percent of the total, were unemployed. However, 671 of these were out of employment at the time of the survey because they were "needed at home", "financially independent", or "attending school." Hence, to secure more accurate figures of unemployment among those who really wished to secure employment, these 671 persons should be removed from the picture. If this is done, the resulting percentage of employment is 55.6, and the corresponding percentage of unemployment 44.4. The respective percentages of employment for men and for women, figured on this basis, are 56.6 and 53.4.

Deplorable as these conditions are, yet the picture presented is not so discouraging when one considers conditions at large during the years 1933 and 1934. In a publication of the U. S. Department of Labor [2] an average index figure of 69 was assigned to the employment situation for 1933 as compared with 104.8 in 1929.[3] Data for specific occupations showed heavy losses in each field. Whereas the number of iron and steel workers was estimated at 881,000 in 1929, the number so estimated for 1933 was only 503,400. The estimated number of wage earners in the manufacture of machinery, excluding transportation equipment, was reduced from 1,105,700 in 1929 to 517,100 in 1933. Employees in railroad repair shops numbered 398,200 in 1929, and 250,600 in 1933. Rubber industries employed 149,100 persons in 1929 and 99,300 in 1933. It is to be expected that, when unemployment has exacted such a heavy toll among all workers, the situation will be reflected among the members

[1] This chapter was written with the collaboration of Alice Rowell, graduate student at Gallaudet College.

[2] Trend of Employment, May 1934. Washington, D. C., Government Printing Office. (Bureau of Labor Statistics Serial No. R. 125.)

[3] Index based on 3-year average (1923-25), as 100.

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of any one group, and unfortunately handicapped groups are among the first to suffer. The details of the picture as applied to the deaf and hard-of-hearing are shown in table 13.

TABLE 13.—DATA ON EMPLOYMENT STATUS OF SAMPLING

Employment status	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Now employed [1]	10,497	53.7	7,378	55.8	3,119	49.4
Now unemployed [1]:						
Less than 1 year	2,124	10.9	1,348	10.2	786	12.5
1 to 2 years	1,663	8.5	1,093	8.2	570	9.0
2 to 3 years	1,593	8.2	1,150	8.7	443	7.0
More than 3 years	3,654	18.7	2,257	17.1	1,397	22.1
Total number reporting this item	19,541	100.0	13,226	100.0	6,315	100.0

[1] At time of survey. See qualifying data presented on page 23.

CAUSES OF UNEMPLOYMENT

The answer to the question "Why did you lose your position?" is bound to be given in terms of one's own interpretation of the situation. Such interpretation may be objective and accurate. Frequently, however, it is influenced by personal considerations. It is with full recognition of this fact that table 14 is presented summarizing the reasons for unemployment as given by 8,959 members of the sampling. The first three reasons listed can probably be charged to the depression, even though they are called by different names. If this is true, we find that 62.3 percent of those who were unemployed at the time of the survey considered the economic depression the cause of their misfortune. Other miscellaneous reasons follow in rapidly descending frequency.

TABLE 14.—REASONS FOR UNEMPLOYMENT

(As given by 8,959 deaf and hard-of-hearing persons)

Reason given	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Reduction of force	3,205	35.8	2,326	40.1	879	27.8
Shop closed	1,219	13.6	921	15.9	298	9.4
Depression	1,151	12.9	792	13.7	359	11.3
Hearing defect	1,414	15.8	810	14.0	604	19.2
Illness, accident	567	6.3	321	5.5	246	7.8
Needed at home	437	4.9	23	.4	414	13.1
Moved out of town	279	3.1	146	2.5	133	4.3
Financially independent	169	1.9	143	2.5	26	.8
Work seasonal	161	1.8	98	1.7	63	2.0
Work too hard	146	1.6	85	1.4	61	1.9
Change of administration	82	.9	51	.9	31	1.0
Attending school	65	.7	35	.6	30	.9
Trouble with boss or foreman	28	.3	22	.4	6	.2
Strike	19	.2	12	.2	7	.2
Difficulties regarding compensation	6	.1	5	.1	1	
Miscellaneous	11	.1	6	.1	5	.1
Total number reporting this item	8,959	100.0	5,796	100.0	3,163	100.0

TYPES OF EMPLOYERS

An inquiry into the type of employer for whom each deaf or hard-of-hearing person worked during either present or most recent occupation brought replies from the entire sampling of 19,580 persons. The results are shown in table 15. Private industries or professions have absorbed an overwhelming majority of the workers. More than 5 percent were engaged on emergency relief projects, and only a slightly smaller number were in the regular service of city, county, State, or Federal Government. The remaining 4.2 percent were employed in residential schools for the deaf or in day schools. A further analysis of the types of occupations carried on in these respective fields will be made in chapter 4

TABLE 15.—TYPES OF EMPLOYERS

(As of present or most recent position [1] held)

Type of employer	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
Private industries or professions	16,642	85.0	11,258	85.0	5,384	85.1
Emergency relief projects	1,110	5.6	1,002	7.6	108	1.7
Government service:						
City, county, or State Government	799	4.1	451	3.4	348	5.5
U. S. Government	206	1.1	151	1.1	55	.9
Residential schools for the deaf	711	3.6	370	2.8	341	5.3
Day schools for the deaf or hard-of-hearing	112	.6	19	.1	93	1.5
Total number reporting this item	**19,580**	**100.0**	**13,251**	**100.0**	**6,329**	**100.0**

[1] "Present position" is to be interpreted as one held at the time of the study.

RELATION OF EMPLOYMENT STATUS TO OTHER FACTORS

The data available made it possible to study the relationship of employment status to certain items such as age, degree of hearing loss, educational achievement, and allied factors. Figures 2 to 8, inclusive, show these relationships graphically and give rise to interesting conclusions. It must be kept in mind, however, that a causal relationship between the two factors concerned in each case is not assured. If, for example, there is a high correlation between a person's educational achievement and his chances for employment, it cannot be said that education *per se* is the sole causal factor of success, though it may contribute substantially to the result. The initial ability of the individual to profit by a university education probably also influences his ability to secure employment. In this, as in other cases, beneath each of the factors being correlated there may be an underlying common factor which affects both of them. It is with this reservation, therefore, that comments are made on figures 2 to 8.[4]

Age.—Figure 2 shows clearly that on the whole with deaf and hard-of-hearing persons, as with the normally hearing, one finds the largest number employed between the ages of

[4] The number of cases involved in these figures varies slightly, depending upon the number of persons reporting the respective items.

30 and 50. The sharp descent for men after the age of 49 into the realms of unemployment is worthy of note. The young woman from 20 to 29 years of age seems to have a slight advantage over her older sisters, but the difference is

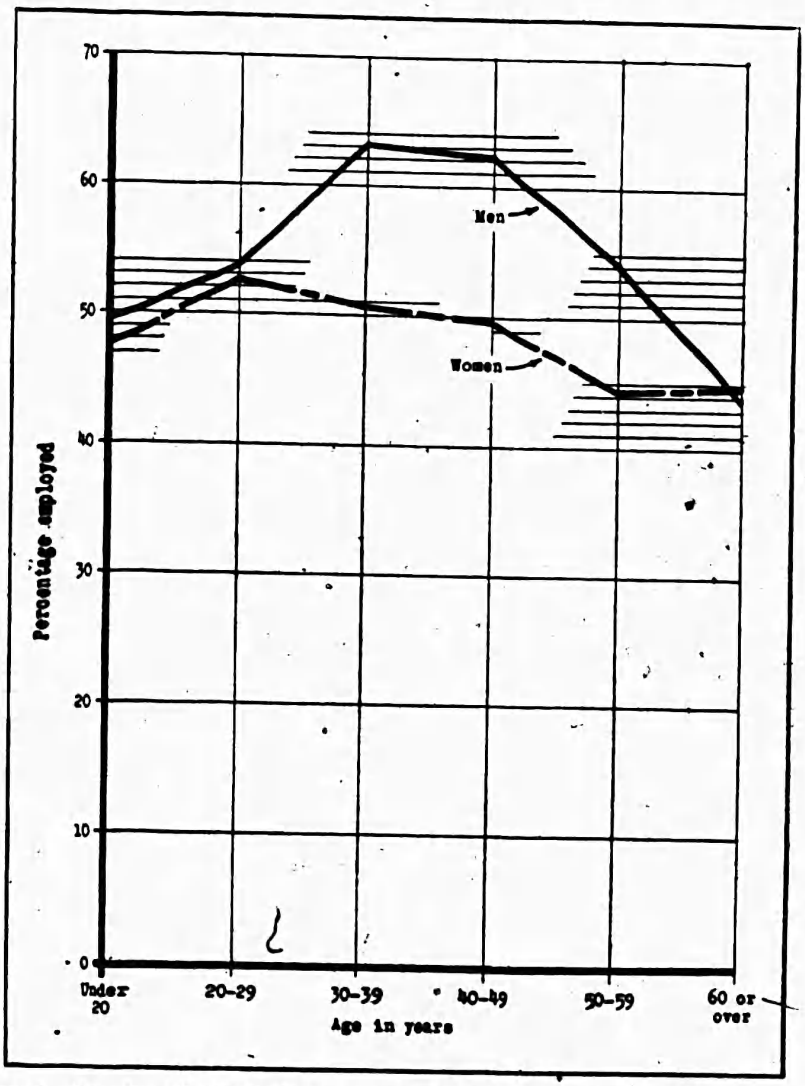

FIGURE 2.—Showing relationship between age and employment status. (19,471 deaf and hard-of-hearing persons.)

so small as to be relatively insignificant in the total picture. So also the apparent advantage of women over men in the age group of 60 or over is too little to be considered of any significance.[5] The trend of the picture is in general what one might expect for both sexes.

[5] The number of persons in each age group is given in table 3 on page 45. The youngest and the oldest groups are relatively very small.

Degree of hearing loss.—It was pointed out in chapter 2 that somewhat more than one-half of the sampling seemed to belong in the group usually known as "hard-of-hearing" and reported an ability to understand loud speech, a comparatively small number using mechanical hearing aids to help them. We find that in securing and holding employment the men of this "hard-of-hearing" group appear to be at a disadvantage in comparison with the profoundly deaf. In figure 3 it is shown that among the profoundly deaf (those who "cannot hear speech at all understandingly") 60.7 percent of the men and 50.9 percent of the women were employed, while among those who "can hear loud speech without earphones" 51.1 percent of the men and 48.2 percent of the women were employed. Intermediate between these two figures are those, comparatively few in number, who "can hear loud speech with earphones."

The record for women does not show a significant difference in the three groups, but that for men causes one to consider the reason for the discrepancy of almost 10 percent between the two extremes of the curve.[6] Perhaps in some cases the phrase "can understand loud speech without earphones" expresses wishful thinking instead of actual fact. Many hard-of-hearing persons are sensitive and prone to conceal their handicap as much as possible. Perhaps this very attitude has made it more difficult for them to make adjustment in a situation in which it is necessary to take directions quickly. Perhaps those who frankly admit their handicap, who seek a job in which it will be of least detriment, and who use whatever means are available to compensate for it are more likely to find and to keep their places in the occupational world. Whatever the cause, the figures seem to point to an advantage in their favor, at least for the men.

[6] This is more than 10 times the standard error of the difference between the percentages. In testing the reliability of all percentage differences, Yule's formula of the "standard deviation of simple sampling" or the "standard error of sampling" was used. This formula is

$$\sigma_{12}=\sqrt{\frac{p_1q_1}{N_1}+\frac{p_2q_2}{N_2}}$$

In this formula p_1 and p_2 represent respective percentages in the two groups; q_1 and q_2 represent the results of subtracting these percentages from 1.00; and N_1 and N_2 represent the respective populations of the groups. G. U. Yule. An Introduction to the Theory of Statistics. p. 269.

Age at which hearing loss was first noticed.—Again an interesting situation is brought to light in figure 4. Persons who have suffered a hearing loss early in life are represented among the employed in greater proportion than are those

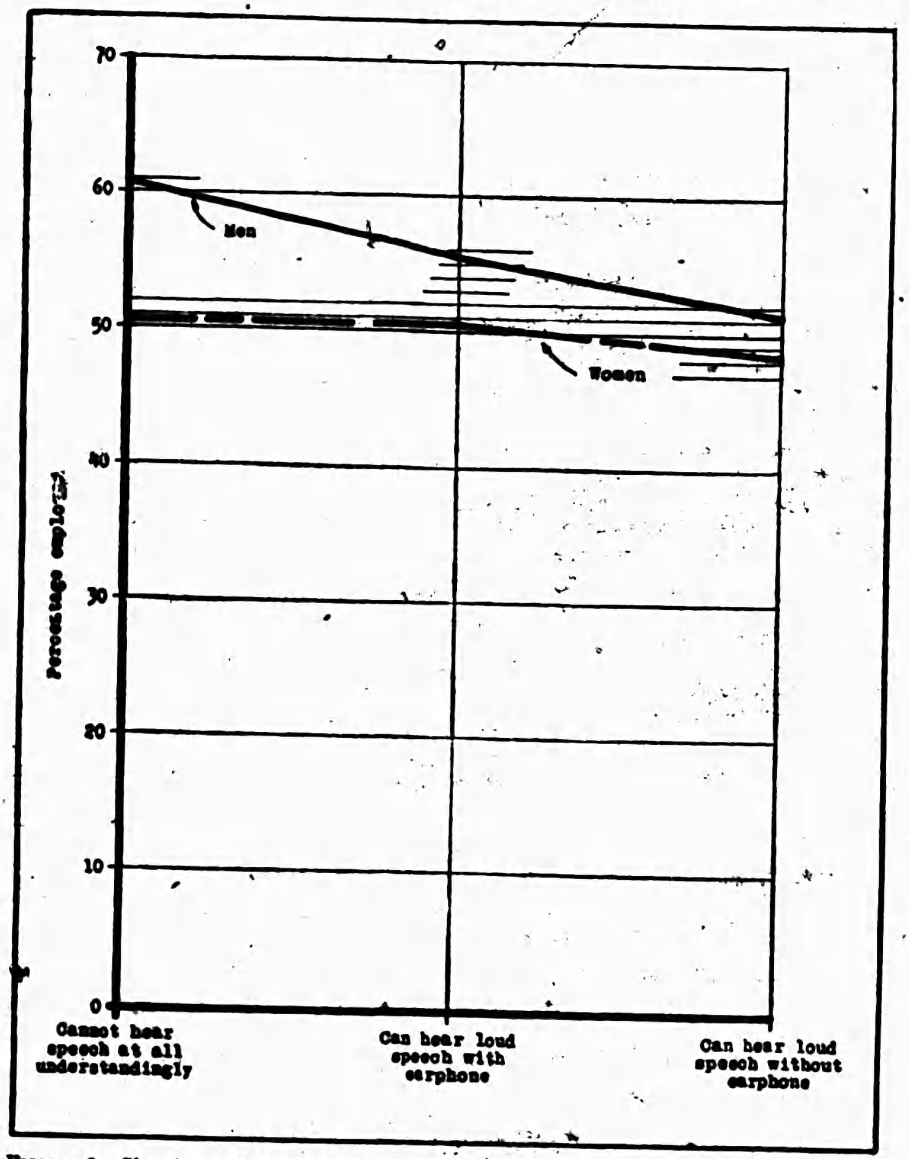

FIGURE 3.—Showing relationship between degree of hearing loss and employment status. (19,553 deaf and hard-of-hearing persons.)

who became deaf or hard-of-hearing in maturity. But again, as in figure 3, the trend is much more definite for men than for women.[7] It seems logical to suppose that the person

[7] For men the difference between the two extremes of the curve is more than 10 times the standard error of the difference, but for women it is less than 3 times the standard error of the difference.

who has grown up with a handicap would find it much less difficult to make the necessary adjustment as an adult of employable age than the person upon whom it came later in life, when habits and contacts that had already become

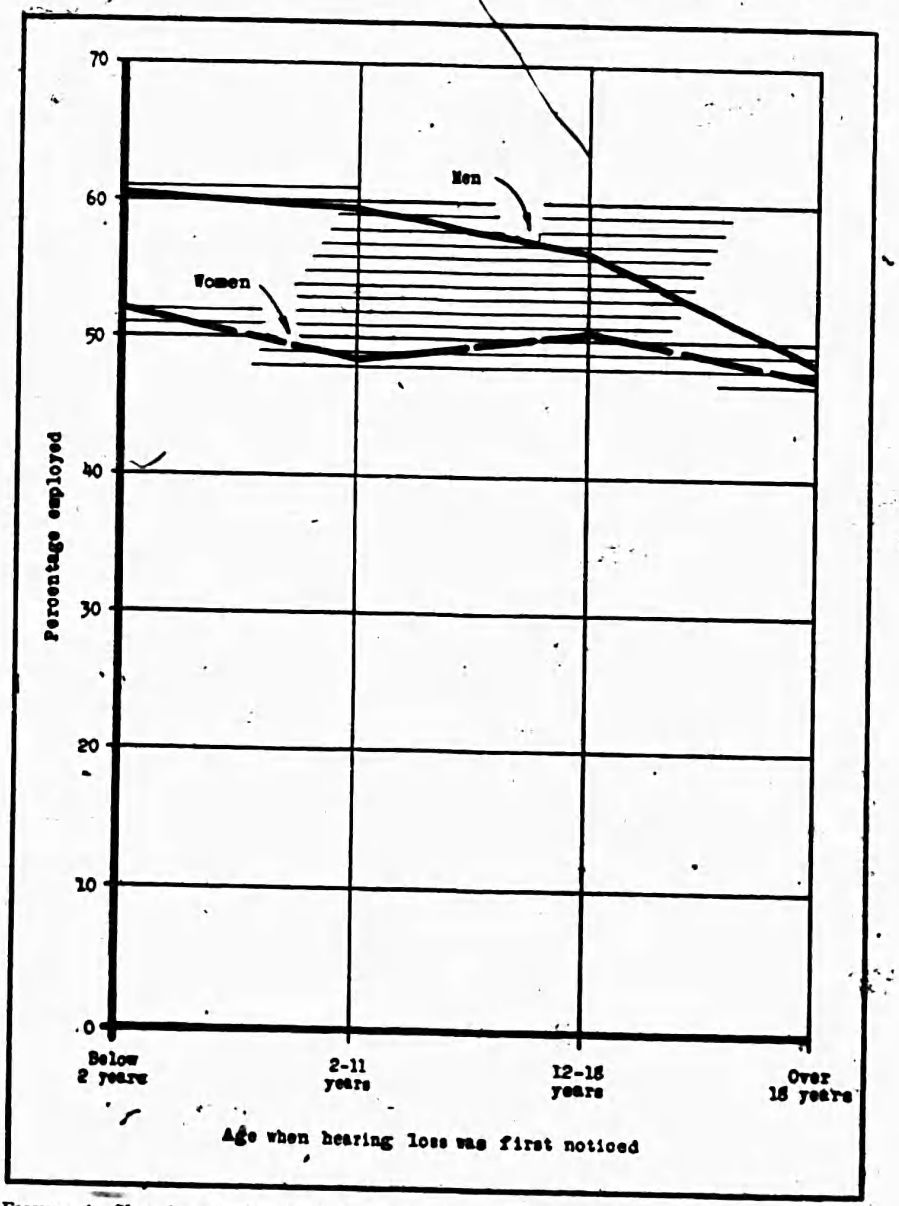

FIGURE 4.—Showing relationship between employment status and age when hearing loss was first noticed. (19,494 deaf and hard-of-hearing persons.)

established necessarily suffered complete reversals. For the child who is born deaf or who becomes deaf in early years all educational plans are made in the light of his handicap, looking toward his best possible adjustment in social and

occupational life. Loss of hearing in adulthood, on the other hand, throws into confusion all one's plans and ambitions, and demands a total readjustment of occupational activities.

Means of communication.—Quite consistent with the findings presented in figures 3 and 4 are those shown in figure 5, depicting the relationship between means of communication and employment status. Means of communication is influenced by the age at which deafness occurs as well as by the degree of deafness. In the group of 12,417 persons [8] who said that they communicated with their employers or superior officers by spoken language would naturally be included the 11,039 hard-of-hearing persons who reported ability to understand loud speech with or without a hearing aid.[9] The small remainder of 1,378 would represent the number of profoundly deaf persons who said that they used the spoken language in communicating with employers. Figures previously given in figure 3 indicate that the hard-of-hearing seem to have found it somewhat more difficult to secure and to hold employment than the profoundly deaf. Hence one must also expect that those who use spoken language (among whom are predominantly the hard-of-hearing) would appear statistically to be at a disadvantage in this respect. Figure 5 bears out this reasoning, particularly for the men. Women show an irregularity in that those who use writing are at the greatest disadvantage, probably because the types of occupations in which writing can be used without detriment are not open to them to nearly so great an extent as they are to men.

When the profoundly deaf are isolated from the hard-of-hearing with respect to this item, much of the significance of the differences in employment status is lost. Of the profoundly deaf who used writing, 56.1 percent were employed. Of those who used spoken language, 58.3 percent, and of those who used signs, gestures, or the manual alphabet 63.2 percent were found in employment. When the criterion of statistical reliability is applied to the differences between these percentages in terms of the totals they represent, the

[8] See table 8, in chapter 2. If two means of communication were indicated on the questionnaire, it was discarded for this item. Only those reporting a chief or sole means of communication with employer were included in the analysis.

[9] See table 6 in chapter 2.

only one that proves significant is the difference between those who must resort to writing and those who use signs, gestures, or the manual alphabet. The former represents by far the largest group of the sampling of profoundly deaf persons, but apparently they are at a disadvantage in

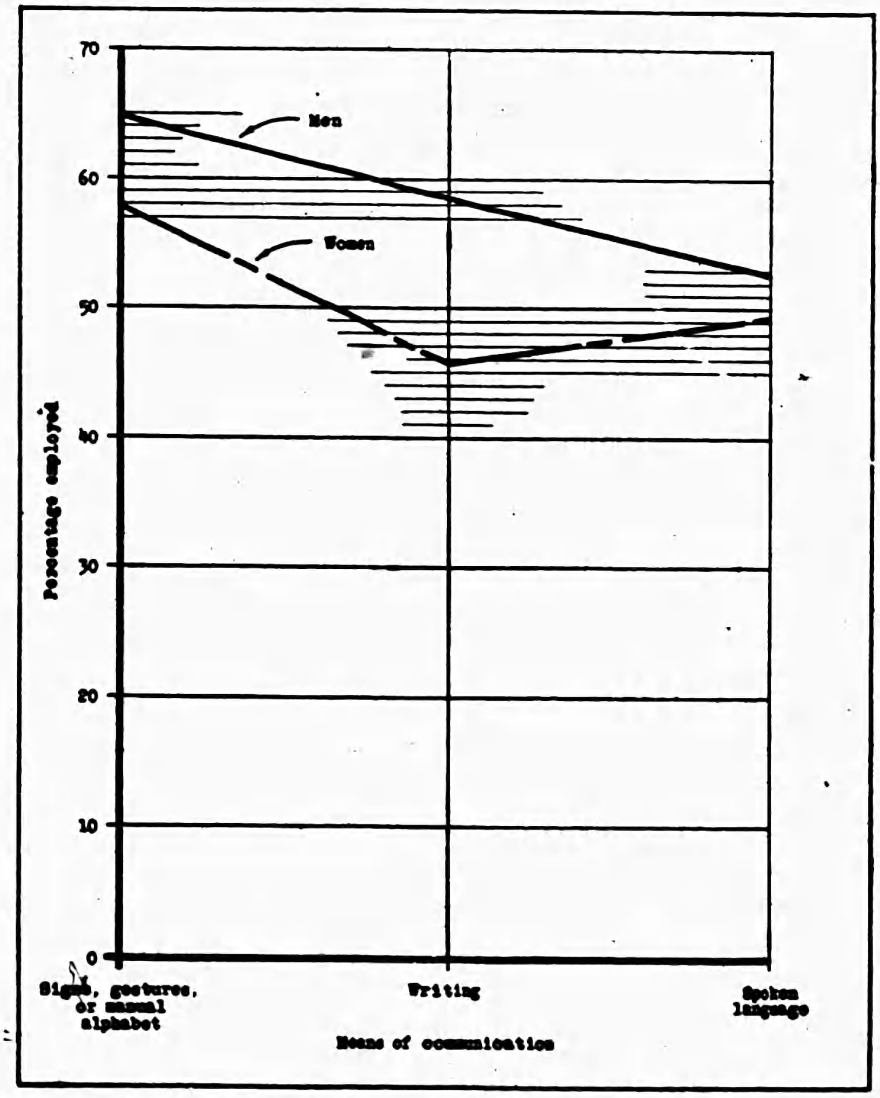

FIGURE 5.—Showing relationship between means of communication with employer and employment status. (19,288 deaf and hard-of-hearing persons)

employability. Needless to say, however, communication with one's superior officer by means of signs and the manual alphabet presupposes familiarity on the part of that superior officer with this means of communication. To such extent a restriction is placed upon the occupational opportunities

open to deaf persons using this mode of communication. Residential schools for the deaf in which the manual method is one of the techniques utilized represent in the present study one of the major sources of employment in which the employer as well as the employee is skilled in the use of the manual alphabet and signs. The varied occupational activities carried on in these schools in dormitory, household, shops, and schoolroom seem to have afforded a number of opportunities of useful employment (limited, of course, by the size of the staff) for those who are unable to converse orally.

Education.—Figure 6 furnishes an example of the apparent effect of education upon employment and occupational success. The trend for both sexes is unmistakably upward in percentage of employment as educational preparation increases. It is true in periods of depression that persons of high educational qualifications often accept positions which at other times would go to individuals with much more limited academic training, and that, therefore, the less educated are pushed down the line and eventually out of employment altogether. No doubt this has some bearing upon the low percentage of employment among those who "never attended school." It should be remembered, too, that fundamental to education is the ability to profit by education, and, it is assumed, also the accompanying ability to get and to hold a job. These items probably contribute to the fact that deaf and hard-of-hearing persons who have attended high school or college seem to have been much more successful in maintaining the status of employment than have those of only elementary education or with no schooling at all. The differences are statistically significant for both sexes, but even more so for men than for women.

Extent to which occupational training was followed.—From figure 7 it appears that those who have had definite occupational training and then have followed exclusively the occupation for which training was secured have a moderate advantage in obtaining and keeping employment. Perhaps it was their good fortune to find an opening and to remain with it. Perhaps they represent the cream of the trainees whose work merited continuance. Perhaps, too, they were

persistent in staying with the occupation, while others became restive and shifted from one to another.

However, a closer scrutiny of figure 7 will show that, whereas 65.1 percent of the men who had followed their train-

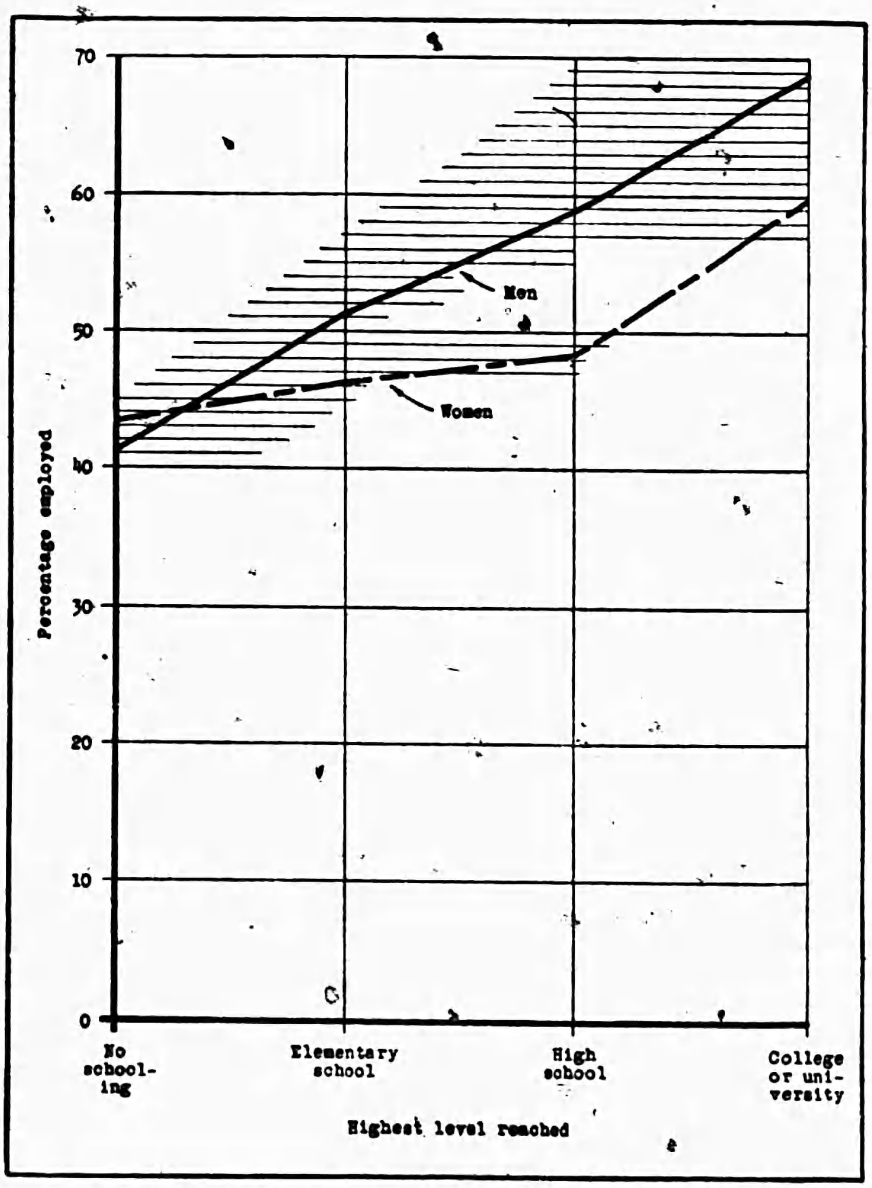

FIGURE 6.—Showing relationship between highest level of school work reached and employment status. (19,444 deaf and hard-of-hearing persons)

ing altogether were employed, 60.6 percent of those who had not followed their training at all were also employed. The difference is not so great after all between these two extremes. On the other hand, all groups of men who had specific occu-

pational training, regardless of the extent to which they followed it, showed a decided advantage over those not having definite vocational preparation, the percentage of employment for this latter group being only 48.7. For

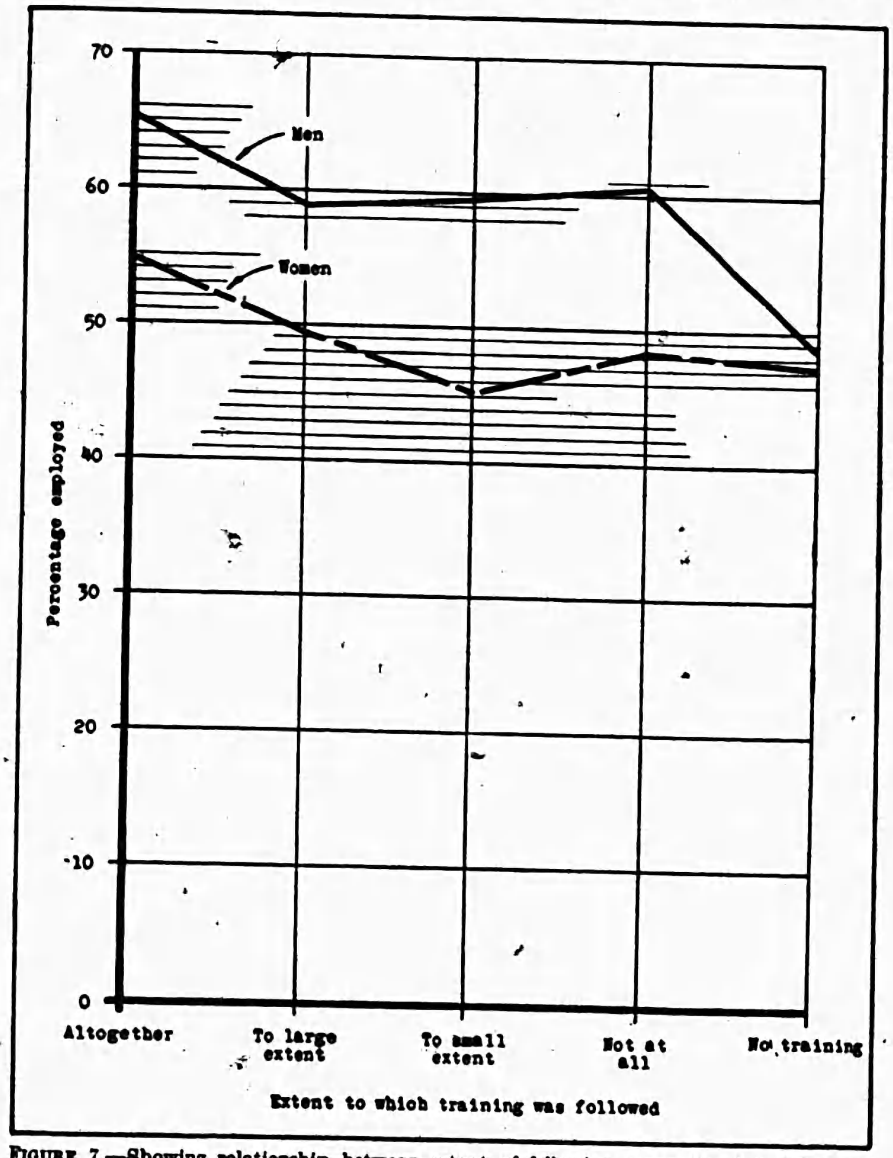

FIGURE 7.—Showing relationship between extent of following occupational training and employment status. (18,422 deaf and hard-of-hearing persons)

women the difference is not so marked, all percentages being considerably lower than those for men and maintaining a more nearly uniform level. With the exception of those who followed their training altogether, preparation for some specific occupation does not in this study seem to have as

close a connection with employment status for women as for men.

In this connection it is interesting to note that the source of occupational training seems to make little difference in the later employment status of the individual. Of the men

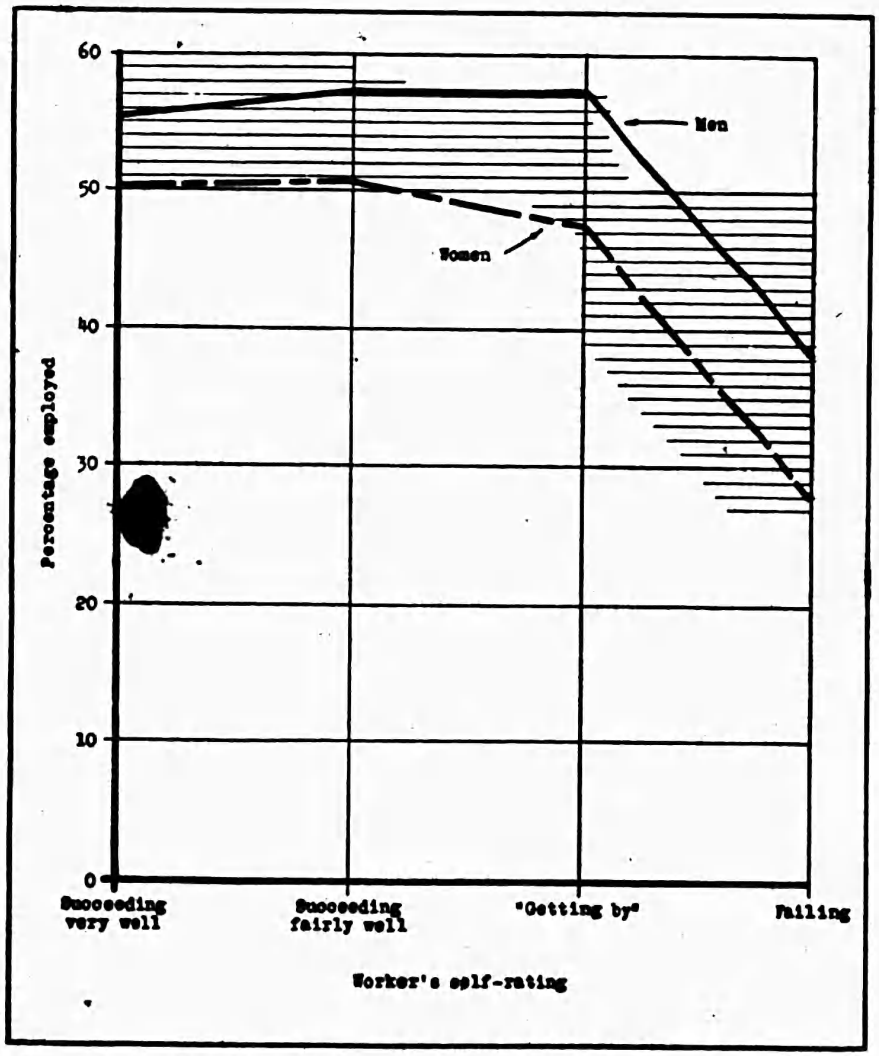

FIGURE 8.—Showing relationship between worker's self-rating and employment status. (19,493 deaf and hard-of-hearing persons)

and women who received their training in a school for the deaf, 62.4 percent and 50.6 percent, respectively, were employed. Of those who had been trained in a public high school or other institution, aside from schools for the deaf, 58.4 percent and 51.2 percent, respectively, were employed.

The differences are so small that they cannot be considered statistically significant.

Worker's self-rating.—The consistency of the data furnished by the study is again shown in figure 8 in which the worker's self-rating is related to his employment status. It is to be expected that the person who cannot find employment is more likely to look upon himself as a failure than the one who has found a place for himself in the occupational world. The sharp drop of the curve in figure 8 bears out this expectation. Only 38.4 percent of the men and 27.9 percent of the women who rated themselves as "failing" were employed, while 55.5 percent and 50.3 percent, respectively, of those who rated themselves as "succeeding very well" were in employment. Whether actual failure produced unemployment or unemployment caused the rating of failure cannot be determined on the basis of available data.

SUMMARY

1. Somewhat more than 50 percent of the sampling were reported as employed when the investigation was made. While one would most certainly wish that this figure were higher, it must be considered in the light of current economic conditions at the time of the survey. Comparisons with figures of general trends of employment in 1933–34 are not as unfavorable to the deaf and hard-of-hearing included in this survey as one might at first suppose.

2. More than 60 percent of those who were unemployed at the time of the survey considered the economic depression the major cause of their misfortune. Only 15.8 percent gave hearing loss as the primary reason for unemployment. Other reasons given included illness or accident, seasonal work, dissatisfaction with a job or inability to carry it on, and miscellaneous factors affecting comparatively few of the group.

3. A distribution of present or most recent jobs held showed that private industry or professions had absorbed 85 percent of the workers. Emergency relief projects had afforded placement for 5.6 percent. City, county, State, or Federal Government service had been the field occupied

by 5.2 percent. Day and residential schools for the deaf accounted for the remainder (4.2 percent).

4. The relation of employment status to other factors can be presented only as factual data, there being no basis in the present study for explaining the facts that exist. A correlation between two factors does not necessarily mean a causal relationship between them. The following items are pointed out with this in mind:

(*a*) The percentage of employment is greatest among persons who were from 30 to 50 years old.

(*b*) Among the men of the sampling the hard-of-hearing seem to have encountered somewhat greater difficulty in securing employment than the profoundly deaf.

(*c*) So also the men who lost their hearing in maturity seem to have had greater difficulty in maintaining their employment status than those who became deaf in infancy or early childhood.

(*d*) For the entire sampling, including both profoundly deaf and hard-of-hearing, the greatest percentage of employment is found among the group using signs, gestures, or manual alphabet. This is a logical corollary of the statements made above in (*b*) and (*c*).

(*e*) When the hard-of-hearing are removed from the picture, however, differences in employment status for varying means of communication are considerably lessened. Neither oral language nor manual speech seems to stand out as particularly advantageous to the employment status of the profoundly deaf.

(*f*) The largest proportion of employment is found among both men and women of college education, and the smallest percentage among those having little or no school training.

(*g*) Those men who had had no occupational training were unemployed to a significantly greater degree than those who had had such training.

(*h*) The workers who rated themselves as failing were to a much greater extent unemployed than those who rated themselves as succeeding.

CHAPTER 4: TYPES OF OCCUPATIONS FOLLOWED [1]

SINCE THE project was undertaken for the purpose of furnishing data that might be of help in making more effective the program of vocational guidance and education of deaf and hard-of-hearing boys and girls, the types of occupations represented in the sampling constituted an important consideration in the study. Relationships between these occupations and certain other factors were investigated for whatever light they might throw upon the solution of the problem.

The ability of the deaf and the hard-of-hearing to make adjustment to a variety of employment situations is demonstrated by the fact that more than 250 general occupational activities were reported in the survey. Obviously it was not practical to list these separately in every tabulation made. Hence for purposes of analysis they were grouped into 10 occupational classes, based upon the classification used by the U. S. Bureau of the Census in the Classified Index of Occupations as of 1930. The 10 occupational groups referred to, with the specific occupations included in each, are as follows:

Agriculture, fishing, hunting:
- Agricultural proprietors.
- Fishermen and oystermen.
- Hunters and trappers.
- Unpaid family workers in agriculture.
- Wage workers in agriculture.

Manufacturing and mechanical trades (including apprentices):
- Bakers.
- Blacksmiths.
- Boilermakers.
- Boiler washers and engine hostlers.
- Bookbinders.
- Brass molders, founders, and casters.
- Brick and stone masons.
- Buffers and polishers (metal).
- Builders and building contractors.
- Cabinetmakers.
- Carpenters.

[1] This chapter was written with the collaboration of Percival Hall, Jr., and Kenneth Braly, graduate students at Gallaudet College.

Manufacturing and mechanical trades—Continued.

Cement finishers.
Compositors, linotypers and typesetters.
Coopers.
Cranemen, derrickmen, hoistmen, etc.
Dressmakers and seamstresses (not in factories).
Dyers.
Electricians.
Electrotypers and stereotypers.
Enamelers, lacquerers, and japanners.
Engineers (stationary).
Engravers.
Filers (metal).
Firemen (except locomotive and fire department).
Forgemen and hammermen.
Furnace men, smelter men, and pourers (metal industries).
Glass blowers in glass factories.
Goldsmiths and silversmiths.
Grinders (metal).
Heaters (metal industries).
Iron molders, founders, and casters.
Jewelers and lapidaries (factory).
Jewelers and watchmakers (independent).
Lithographers.
Loom fixers.
Machinists.
Mechanics (not otherwise specified).
Millwrights.
Oilers of machinery.
Other metal molders, founders, and casters.
Owners, operators, and proprietors (manufacturers).
Painters, glaziers, and varnishers (building).
Painters, glaziers, and varnishers (factory).
Paper hangers.
Pattern and model makers.
Plasterers.
Plumbers and gas and steam fitters.
Pressmen and plate printers.
Rollermen in flour and grain mills.
Roofers or slaters.
Sawyers.
Shoemakers and cobblers (not in factories).
Stonecutters.
Structural iron workers (building).
Tailors and tailoresses in stores, shops, or factories.
Tinsmiths and sheet-metal workers.
Tool makers, die setters, and sinkers.
Upholsterers.

Transportation and communication:
- Baggagemen (steam railroad).
- Captains, masters, mates, pilots.
- Chauffeurs.
- Draymen, teamsters, and carriage drivers.
- Linemen.
- Longshoremen.
- Mail carriers.
- Motor truck and tractor drivers.
- Postmasters.
- Railroad mail clerks.
- Sailors, deck hands.
- Ticket and station agents (steam railroad).
- Yardmen (steam railroad).

Trade:
- Advertising agents.
- Auctioneers.
- Bankers and bank officials.
- Clerks in stores.
- Commercial brokers and commission men.
- Commercial travelers, canvassers, and sales agents.
- Decorators, window dressers, etc.
- Deliverymen.
- Demonstrators (wholesale and retail).
- Employment office keepers.
- Fruit graders and packers (wholesale and retail).
- Gasoline and oil filling station owners.
- Hucksters and peddlers.
- Importers and exporters (wholesale).
- Insurance agents.
- Loan brokers and pawn brokers.
- Meat cutters (wholesale and retail).
- Milliners and millinery dealers.
- Newsboys.
- Opticians.
- Promoters and brokers (not otherwise specified).
- Real-estate agents.
- Retail dealers (of all kinds).
- Salesmen and saleswomen.
- Stock brokers.
- Undertakers.

Public service (not elsewhere classified):
- City officials and inspectors.
- County officials and inspectors.
- Guards, doorkeepers.
- Probation and truant officers.
- Sheriffs.
- State officials and inspectors.
- United States officials and inspectors.

Professional and semi-professional service, and recreation and amusement:

- Abstractors, notaries, justices of the peace.
- Actors.
- Architects.
- Artists, sculptors, and teachers of art.
- Attendants in places of recreation.
- Authors.
- Chemists, assayers, and metallurgists.
- Chiropractors.
- Civil engineers and surveyors.
- Clergymen.
- College presidents and professors.
- County agents, farm demonstrators, etc.
- Dentists and dentists' assistants.
- Designers.
- Draftsmen.
- Editors and reporters.
- Engineers (electrical).
- Engineers (mechanical).
- Engineers (mining).
- Healers (unclassified).
- Inventors.
- Keepers of charitable and penal institutions.
- Lawyers, justices and judges.
- Librarians and librarians' assistants.
- Musicians and teachers of music.
- Officials of lodges, societies, etc.
- Osteopaths.
- Owners of places of amusement.
- Photographers.
- Physicians and surgeons (and attendants).
- Religious workers.
- School teachers.
- Showmen.
- Social and welfare workers.
- Teachers of athletics or dancing.
- Technicians and laboratory assistants.
- Trained nurses.
- Veterinary surgeons.

Domestic and personal service:

- Barbers, hairdressers, and manicurists.
- Boarding and lodging housekeepers.
- Bootblacks.
- Cemetery keepers.
- Charwomen and cleaners.
- Cooks (except in Army or Navy).
- Elevator tenders.
- Hotel keepers and managers.

Domestic and personal service—Continued.
- Housekeepers and stewards.
- Janitors.
- Launderers and laundresses in domestic service or in hotels, restaurants, boarding houses, etc.
- Nurses (not trained).
- Restaurant, cafe, and lunchroom keepers.
- Servants in hotels, restaurants, boarding houses, etc.
- Other domestic and personal servants.
- Waiters (except in Army or Navy).

Clerical occupations:
- Accountants and auditors.
- Bookkeepers and cashiers.
- Collectors.
- Credit men.
- General office clerks.
- Messengers, bundle and office boys and girls.
- Office appliance operators.
- Purchasing agents.
- Shipping clerks.
- Stenographers and typists.
- Weighers.

Managers (except in domestic and personal service), foremen, inspectors:
- Foremen and overseers.
- Inspectors (forestry, extraction of minerals, transportation, trade, industry).
- Managers and officials.

Operatives and laborers:
- Garbage men.
- Operatives in mill or factory (of all kinds).
- Porters (except in stores).
- Street cleaners.
- Unskilled laborers (not elsewhere classified).
- Watchmen.

PRESENT OR MOST RECENT OCCUPATION OF ALL PERSONS IN THE SAMPLING

Of the 19,580 persons included in the survey, 19,521 reported the occupation held at the time of the investigation, or, if unemployed, the most recent position held.[2] The summary of data reported is shown in table 16. It is significant to note that for both men and women the group of "operatives and laborers" is the largest, more than one-third of the entire sampling being or having been engaged in occupations of this class. "Operatives" are in general to

[2] The terms "present" and "most recent", as used in this connection, relate in every instance to the time of the survey as the point of departure.

be interpreted as workers in mills and factories who operate high-power machines or who perform some other mechanical operation of semiskilled nature. "Laborers" include unskilled workers of all types.

Next in frequency for the group as a whole are the manufacturing and mechanical trades, of which there is a wide variety, and which account for more than one-fourth of the entire sampling of men. Women, as might be expected, are represented here only to a slight extent. For them domestic service and clerical occupations take precedence over others in the list, while professional and semiprofessional activities are also found among a fairly large number.

TABLE 16.—PRESENT OR MOST RECENT OCCUPATION OF ALL PERSONS INCLUDED IN THE SAMPLING

Read the table as follows: Of the 19,521 persons reporting this item, 770, or 3.9 percent, were engaged in pursuits of agriculture, fishing, or forestry; 4,339, or 22.2 percent, were engaged in manufacturing or mechanical trades, etc. Read similarly for men and for women separately.

Occupation	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Total reporting	**19,521**	**100.0**	**13,208**	**100.0**	**6,313**	**100.0**
Agriculture, fishing, and forestry	770	3.9	734	5.5	36	0.6
Manufacturing and mechanical trades	4,339	22.2	3,757	28.4	582	9.2
Transportation and communication	311	1.6	286	2.2	25	.4
Trade	1,339	6.9	950	7.2	389	6.2
Public service	150	.8	142	1.1	8	.1
Professional and semiprofessional service, and recreation and amusement	1,717	8.8	830	6.3	887	14.0
Domestic and personal service	1,842	9.4	609	4.6	1,233	19.5
Clerical occupations	1,984	10.2	810	6.1	1,174	18.6
Managers (except in domestic and personal service), foremen, inspectors	356	1.8	312	2.4	44	.7
Operatives, laborers, and porters (except in stores)	6,713	34.4	4,778	36.2	1,935	30.7

It should be noted that this distribution was made for the sampling as a unit, representing 27 different States and the District of Columbia. Data for individual States will of course vary according to the geographical location and industrial conditions peculiar to each one. Since, however, the States in which the study was carried on were widely scattered from East to West and from North to South, it

seems logical to suppose that the total picture is fairly representative of conditions in the country as a whole.

PRESENT OCCUPATIONS OF PERSONS EMPLOYED

It will be remembered that only somewhat more than half of the persons included in the sampling were employed at the time of the survey. Hence the question might well be asked: Are the data given in table 16 unduly influenced by the inclusion of occupations held previously to the survey by persons unemployed when the study was made?

In order to answer this question, the replies of 10,433 persons who were employed at the time of the investigation were isolated and distributed according to the same plan used in table 16. Table 17 is the result. A comparison of the figures of these two tables shows clearly that the general trend is the same, the differences in percentages being statistically insignificant. It is suggestive, however, that the percentages employed as operatives and laborers and in the manufacturing and mechanical trades both show a slight decrease in table 17. This is what one might expect in the light of developments that had taken place in the employment situation during the year preceding the survey.

TABLE 17.—PRESENT OCCUPATION OF ALL PERSONS EMPLOYED AT TIME OF SURVEY

NOTE.—For directions for reading table, see table 16.

Occupation	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Total reporting	10,433	100.0	7,333	100.0	3,100	100.0
Agriculture, fishing, and forestry	352	3.4	342	4.7	10	0.3
Manufacturing and mechanical trades	2,103	20.1	1,863	25.4	240	7.7
Transportation and communication	144	1.4	136	1.8	8	.3
Trade	770	7.4	598	8.1	172	5.5
Public service	87	.8	81	1.1	6	.2
Professional and semiprofessional service, and recreation and amusement	1,170	11.2	613	8.4	557	18.0
Domestic and personal service	1,021	9.8	405	5.5	616	19.9
Clerical occupations	1,052	10.1	461	6.3	591	19.1
Managers (except in domestic and personal service), foremen, inspectors	239	2.3	210	2.9	29	.9
Operatives, laborers, and porters (except in stores)	3,495	33.5	2,624	35.8	871	28.1

Of great interest is the comparison between the distribution of deaf and hard-of-hearing persons in the respective occupations and the distribution as given in the United States Census report of 1930 for the entire population of the country. Since the first represents only a sampling and the second represents the total population, the two sets of figures in table 18 can be compared only roughly. Moreover, the localities from which the sampling was drawn should be taken into consideration in comparing the percentages engaged in agriculture in the two groups. It is noteworthy, however, that general agreement exists between the two groups with respect to certain occupations. The greatest disagreements occur in agriculture, manufacturing and mechanical trades, transportation, and communication, the sampling of deaf and hard-of-hearing persons being disproportionately concentrated in the manufacturing and mechanical groups and among operatives and laborers.

TABLE 18.—COMPARISON OF OCCUPATIONAL DISTRIBUTION OF DEAF AND HARD-OF-HEARING SAMPLING WITH THAT OF U. S. CENSUS OF 1930

Occupations in which employed	Percentage of total employed in each occupational field	
	Sampling of deaf and hard-of-hearing, 1934	1930 population (U. S. Census)
Agriculture, fishing, and forestry	3.4	23.9
Manufacturing and mechanical trades	[1] 20.1 / [2] 33.5	[3] 28.9
Transportation and communication	1.4	7.9
Trade	[4] 9.7	[4] 12.5
Public service	.8	1.8
Professional service	11.2	6.7
Domestic and personal service	9.8	10.1
Clerical occupations	10.1	8.2
Total	100.0	100.0

[1] Skilled mechanics.
[2] Operatives and laborers.
[3] Includes operatives and laborers.
[4] Includes managers.

RELATION OF PRESENT OCCUPATION TO OTHER FACTORS

How is the occupation in which a person is engaged affected by the degree of hearing loss? By the age at which deafness was first noticed? How is it related to educational achievement? To the occupational training received? Answers to these and similar questions were sought through an analysis of available data yielding facts of relationships. Tables 19 to 27 show the results.

Degree of hearing loss.—It was shown in table 17 that more than 60 percent of the men employed at the time of the survey were in the two groups of (1) operatives and laborers, and (2) manufacturing and mechanical workers. When, however, the degree of hearing loss is considered in relation to this factor, marked differences are found between those men who could hear well enough to understand speech and those who were profoundly deaf. The data in table 19 indicate that, whereas only 46.6 percent of the men who could hear without aid were engaged as operatives or laborers, or as manufacturing or mechanical workers, 75.4 percent of those who were profoundly deaf were employed in these two groups.

On the other hand, while trade activities were found among approximately 15 percent of those men who could hear either with or without a hearing aid, they accounted for only 2.4 percent of those who could not understand speech at all. Similar significant differences are found among the women. In fact, the "operatives" group mounts from 14.8 percent for women who can hear without earphone to 50.7 percent for those who are profoundly deaf. These and other differences shown in table 19 and in figure 9 indicate that, as hearing loss increases the occupational activities become more restricted, being concentrated among those in which extensive communication with others is not an essential factor.

TABLE 19.—PRESENT OCCUPATION IN RELATION TO DEGREE OF HEARING LOSS

Read the table as follows: Of 7,367 men reporting the items concerned, 3,243 could understand loud speech without an earphone. Of these, 146, or 4.5 percent, were engaged in agriculture, fishing, or forestry; 682, or 21 percent, were engaged in manufacturing or mechanical trades, etc. Read similarly for each group.

Present occupation	Total		Degree of Deafness					
	Men	Women	Understand loud speech without earphone		Understand loud speech with earphone		Could not understand speech at all	
			Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reporting	7,367	3,109	3,243	1,757	338	201	3,786	1,151
Agriculture, fishing, and forestry	343	10	146	6	8	1	189	3
Manufacturing and mechanical trades	1,877	244	682	135	65	27	1,130	82
Transportation and communication	138	8	106	8	4	0	28	0
Trade	594	171	446	123	59	18	89	30
Public service	83	6	68	4	4	1	11	1
Professional and semiprofessional service, and recreation and amusement	616	561	311	378	37	35	268	148
Domestic and personal service	407	614	187	347	24	40	196	227
Clerical occupations	462	591	306	476	33	45	123	70
Managers (except in domestic and personal service), foremen, inspectors	210	29	159	20	26	3	25	6
Operatives, laborers, and porters (except in stores)	2,637	875	832	260	78	31	1,727	584
PERCENT DISTRIBUTION								
Agriculture, fishing, and forestry			4.5	0.3	2.4	0.5	5.0	0.3
Manufacturing and mechanical trades			21.0	7.8	19.2	13.4	29.8	7.1
Transportation and communication			3.3	.5	1.2	.0	.7	.0
Trade			13.8	7.0	17.4	9.0	2.4	2.6
Public service			2.1	.2	1.2	.5	.3	.1
Professional and semiprofessional service, and recreation and amusement			9.6	21.5	10.9	17.4	7.1	12.9
Domestic and personal service			5.8	19.7	7.1	19.9	5.2	19.7
Clerical occupations			9.4	27.1	9.8	22.4	3.2	6.1
Managers (except in domestic and personal service), foremen, inspectors			4.9	1.1	7.7	1.5	.7	.5
Operatives, laborers, and porters (except in stores)			25.6	14.8	23.1	15.4	45.6	50.7

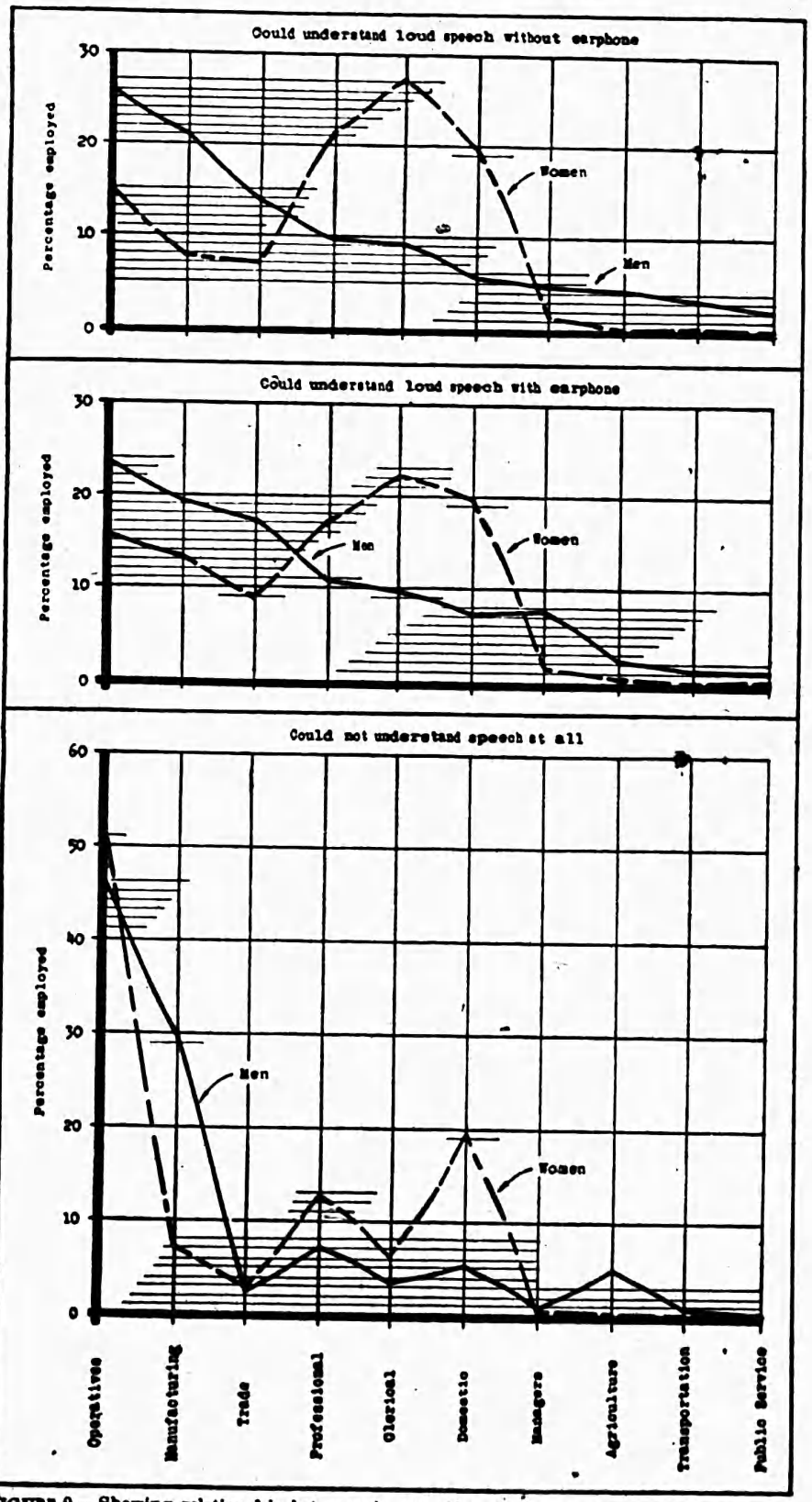

FIGURE 9.—Showing relationship between degree of hearing loss and type of employment. (10,476 deaf and hard-of-hearing persons)

TABLE 20.—FORTY OCCUPATIONS REPORTED MOST FREQUENTLY BY MEN EMPLOYED AT TIME OF SURVEY

NOTE.—"Total number in group", as here given, includes persons employed in occupations other than those here listed.

Occupation	Profoundly deaf	Could understand speech with or without earphone
Total number in group	**3,786**	**3,581**
1. Operative (in mill or factory)	1,173	455
2. Unskilled laborer	533	438
3. Compositor, linotyper, typesetter	330	72
4. Shoemaker, cobbler	129	22
5. Teacher	128	55
6. Painter, glazier, varnisher	105	57
7. Forester or forest worker	98	58
8. Farmer or farm worker	90	95
9. Janitor	89	105
10. Clerk (except in store)	75	192
11. Carpenter	67	77
12. Machinist or mechanic	64	119
13. Cabinetmaker	50	15
14. Electrotyper or lithographer	49	19
15. Tailor	47	21
16. Hotel or domestic servant	46	22
17. Baker	45	24
18. Retail dealer	44	172
19. Buffer, polisher, filer, grinder (metal)	44	14
20. Pressman (printing)	42	19
21. Upholsterer	39	9
22. Welfare worker	36	21
23. Barber, hairdresser, manicurist	24	37
24. Shipping clerk	22	22
25. Porter	21	17
26. Salesman, canvasser, commercial traveler	21	159
27. Motor truck and tractor driver	20	39
28. Owner, manager, or official of plant	19	153
29. Foreman or overseer	15	78
30. Accountant, bookkeeper, cashier	15	82
31. Draftsman	13	26
32. Electrician	11	29
33. Clergyman	7	21
34. Guard, watchman, doorkeeper	5	34
35. Plumber, gas and steam fitter, boilermaker	4	55
36. Real estate or insurance agent	3	86
37. Engineer (stationary)	3	22
38. Physician	3	31
39. Civil engineer, surveyor	2	21
40. Attorney	1	37

This finding is further substantiated when one considers the specific occupations reported most frequently by men and women, respectively. These are listed in tables 20 and 21, together with the number of persons engaged in each one. Whereas there is only 1 profoundly deaf person who reports himself as an attorney, there are 37 who have some hearing so reporting. Whereas there is only 1 deaf woman who is reported as a "real estate agent", there are 20 hard-of-hearing agents of this type. Obvious conditions con-

nected with these and other occupations practically close them to the person who cannot hear. It is gratifying to find that even one or two or three profoundly deaf persons are so employed.

TABLE 21.—TWENTY OCCUPATIONS REPORTED MOST FREQUENTLY BY WOMEN EMPLOYED AT TIME OF SURVEY

NOTE.—"Total number in group", as here given, includes persons employed in occupations other than those here listed.

Occupation	Profoundly deaf	Could understand speech with or without ear phone
Total number in group	1,151	1,958
1. Operative (in mill or factory)	574	286
2. Hotel or domestic servant	120	178
3. Teacher	75	165
4. Dressmaker	65	133
5. Welfare workers	53	63
6. Clerk (except in store)	44	273
7. Waitress	27	12
8. Housekeeper	21	61
9. Milliner	18	14
10. Hairdresser or manicurist	17	34
11. Typist	11	105
12. Office appliance operator	11	28
13. Cook	10	19
14. Boarding or lodging house keeper	9	53
15. Saleswoman, canvasser, or commercial traveler	5	58
16. Bookkeeper or cashier	2	104
17. Librarian	2	23
18. Manager or official of business	2	17
19. Trained nurse	1	27
20. Real estate agent	1	20

Age at which hearing loss was first noticed.—The earlier in life a hearing loss is sustained, the more difficult it becomes to establish or to retain normal speech. Hence, one might expect to see a relationship between type of occupational activity and the age when deafness was first noticed which is similar to that already noted as existing between occupational activity and degree of deafness. That this expectation is realized is shown in table 22. Most significant among the data there shown are (1) the decrease of both men and women found among the operatives and unskilled laborers as the age when the hearing loss was first noticed increases, and (2) a corresponding increase in the groups of trade, clerical, and professional workers. Male workers in the manufacturing and mechanical trades show the same tendency as the operatives and unskilled laborers, but not to so great an

extent. On the other hand the percentage engaged in domestic service remains quite stable, as well as the very small percentage engaged in agricultural pursuits.

TABLE 22.—PRESENT OCCUPATION IN RELATION TO AGE AT WHICH HEARING LOSS WAS FIRST NOTICED

NOTE.—For directions for reading table, see table 19

Present occupation	Total		Age When Hearing Loss Was First Noticed							
			Under 2 years		2 to 12 years		12 to 18 years		Over 18 years	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11
NUMBER DISTRIBUTION										
Total reporting	7,333	3,100	2,118	743	2,511	852	574	474	2,130	1,031
Agriculture, fishing, and forestry	342	10	124	1	96	4	26	2	96	3
Manufacturing and mechanical trades	1,863	240	593	47	722	58	125	34	423	101
Transportation and communication	136	8	25	1	35	1	16	0	60	6
Trade	598	172	59	21	104	45	72	21	363	85
Public service	81	6	5	1	13	1	9	0	54	4
Professional and semiprofessional service, and recreation and amusement	613	557	135	64	192	139	67	105	219	249
Domestic and personal service	405	616	118	145	127	181	22	77	138	213
Clerical occupations	461	591	69	52	117	113	72	163	203	263
Managers (except in domestic and personal service), foremen, inspectors	210	29	12	4	42	5	29	7	127	13
Operatives, laborers, and porters (except in stores)	2,624	871	978	407	1,063	305	136	65	447	94
PERCENT DISTRIBUTION										
Agriculture, fishing, and forestry	5.9	0.1	3.8	0.5	4.5	0.4	4.5	0.3		
Manufacturing and mechanical trades	27.9	6.3	28.7	6.8	21.8	7.2	19.8	9.8		
Transportation and communication	1.2	.1	1.4	.1	2.8	.0	2.8	.6		
Trade	2.8	2.8	4.1	5.3	12.5	4.4	17.1	8.2		
Public service	.2	.1	.5	.1	1.6	.0	2.5	.4		
Professional and semiprofessional service, and recreation and amusement	6.4	8.6	7.6	16.3	11.7	22.2	10.3	24.1		
Domestic and personal service	5.6	19.6	5.1	21.2	3.8	16.2	6.5	20.7		
Clerical occupations	3.3	7.0	4.7	13.3	12.5	34.4	9.5	25.5		
Managers (except in domestic and personal service), foremen, and inspectors	.6	.5	1.7	.6	5.1	1.5	6.0	1.3		
Operatives, laborers and porters (except in stores)	46.1	54.9	42.4	35.8	23.7	13.7	21.0	9.1		

TABLE 23.—PRESENT OCCUPATION IN RELATION TO HIGHEST LEVEL OF SCHOOL WORK REACHED

NOTE.—For directions for reading table, see table 19

NUMBER DISTRIBUTION

Present occupation	Total		Highest Level of School Work Reached					
			Elementary		High school		College	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
Total reporting	7,271	3,084	3,608	1,132	2,677	1,334	986	618
Agriculture, fishing, and forestry	339	9	195	5	115	3	29	1
Manufacturing and mechanical trades	1,854	243	1,005	115	711	107	138	21
Transportation and communication	134	8	69	3	55	4	10	1
Trade	588	171	199	57	259	77	130	37
Public service	79	6	45	0	24	4	10	2
Professional and semiprofessional service, and recreation and amusement	605	557	83	40	139	181	383	336
Domestic and personal service	402	612	232	304	151	256	19	52
Clerical occupations	460	588	141	74	208	373	111	141
Managers (except in domestic and personal service), foremen, inspectors	209	29	64	3	86	19	59	7
Operatives, laborers, and porters (except in stores)	2,601	861	1,575	531	929	310	97	20

PERCENT DISTRIBUTION

Agriculture, fishing, and forestry	5.4	0.4	4.3	0.2	2.9	0.2
Manufacturing and mechanical trades	27.9	10.2	26.6	8.0	14.0	3.4
Transportation and communication	1.9	.3	2.0	.3	1.0	.2
Trade	5.5	5.0	9.7	5.8	13.2	6.0
Public service	1.2	.0	.9	.3	1.0	.3
Professional and semiprofessional service, and recreation and amusement	2.3	3.5	5.2	13.6	38.9	54.4
Domestic and personal service	6.4	26.8	5.6	19.2	1.9	8.4
Clerical occupations	3.9	0.5	7.8	28.0	11.3	22.8
Managers (except in domestic and personal service), foremen, inspectors	1.8	.3	3.2	1.4	6.0	1.1
Operatives, laborers, and porters (except in stores)	43.7	47.0	34.7	23.2	9.8	3.2

Highest level of school work reached.—As might be expected, the figures in table 23 indicate that the majority of both men and women who attended college were engaged in pursuits of a professional or skilled nature. Only 9.8 percent of the college men and 3.2 percent of the college women were in the "operatives and laborers" group. Of those who attended only the elementary school, 43.7 percent of the men

and 47 percent of the women were in this group. The whole table gives a picture of the usual type when one studies the relationship between the extent of education and occupational activity. It would be surprising if the situation among the deaf and hard-of-hearing were any different from that encountered among the normally hearing.

TABLE 24.—PRESENT OCCUPATION IN RELATION TO WEEKLY EARNINGS

NOTE.—For directions for reading table, see table 19

Present occupation	Total		Weekly Earnings					
			Less than $20		$20 to $39		$40 or more	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reporting	7,173	3,033	3,667	2,198	2,660	689	846	146
Agriculture, fishing, and forestry	331	10	272	10	53	0	6	0
Manufacturing and mechanical trades	1,361	240	747	216	888	22	196	2
Transportation and communication	135	8	71	6	54	2	10	0
Trade	559	153	238	107	173	39	148	7
Public service	79	6	40	2	23	3	16	1
Professional and semiprofessional service, and recreation and amusement	592	539	99	191	276	244	217	104
Domestic and personal service	400	609	300	552	95	50	5	7
Clerical occupations	432	569	121	268	225	280	86	21
Managers (except in domestic and personal service), foremen, inspectors	202	27	33	14	63	9	106	4
Operatives, laborers, and porters (except in stores)	2,612	372	1,746	832	810	40	56	0
PERCENT DISTRIBUTION								
Agriculture, fishing, and forestry	7.4	0.5	2.0	0.0	0.7	0.0		
Manufacturing and mechanical trades	20.4	9.8	33.4	3.2	23.1	1.4		
Transportation and communication	1.9	.3	2.0	.3	1.2	.0		
Trade	6.5	4.9	6.5	5.7	17.5	4.8		
Public service	1.1	.1	.9	.4	1.9	.7		
Professional and semiprofessional service, and recreation and amusement	2.7	8.7	10.4	35.4	25.7	71.2		
Domestic and personal service	8.2	25.1	3.6	7.2	.6	4.8		
Clerical occupations	3.3	12.2	8.4	40.7	10.2	14.4		
Managers (except in domestic and personal service), foremen, inspectors	.9	.6	2.4	1.3	12.5	2.7		
Operatives, laborers, and porters (except in stores)	47.6	37.8	30.4	5.8	6.6	.0		

Weekly earnings.—Again, the data presented in table 24 are what one might expect. Skilled and professional occu-

pations demand the highest wages, while the large majority of those found in the lower wage groups belong to the unskilled and semiskilled occupational pursuits. No further comment seems necessary here, but the topic of earnings in relation to occupational success will be further considered in chapter 5.

Trade training in schools for the deaf.—Of the total number of 7,378 men and 3,119 women who were employed at the time of the survey, 3,412 men and 869 women reported that they had their trade training in schools for the deaf. A comparison of the type of training received with the actual occupation pursued when this investigation was made leads to some interesting findings. With this comparison in mind tables 25 and 26 should be considered together. They deal essentially with the same group of individuals, although a few persons did not report the occupations for which they had been prepared.

It should be noted that, although 90.8 percent of the men reporting their occupational training were prepared in school for the mechanical trades (as shown in table 25), only 30.9 percent of them (as shown in table 26) were actually engaged in such occupations. Only 4.2 percent of the men had been trained to be operatives or laborers, but 45.5 percent reported that they were so employed. Of the women 43.0 percent had been trained in mechanical trades, but only 5.5 percent reported that they were engaged in such activities. Only 0.5 percent had received training as operatives, but 53.2 percent reported that they were employed in this field of work. The number of persons engaged in agricultural pursuits at the time of the survey, small as it was, was three times as great as the number who had received such training.

Other fields of activity show in varying degrees a similar lack of balance between the training received and actual employment followed. It appears that approximately one-half, probably even more, of the persons trained in schools for the deaf were not making use of their school trade training in the occupations which they were following at the time of the survey.[3]

[3] Compare also table 12 (p. 21) and comments made in connection with the data there presented.

TABLE 25.—OCCUPATIONS PREPARED FOR IN SCHOOL BY ALL PERSONS AT PRESENT EMPLOYED WHO RECEIVED THEIR TRAINING IN SCHOOLS FOR THE DEAF

Read the table as follows: Of the 4,249 employed persons reporting occupational training in schools for the deaf, 56, or 1.3 percent, had been prepared for agriculture, forestry, or fishing; 3,447, or 81.1 percent, had been prepared for manufacturing or mechanical trades; etc. Read similarly for men and for women separately.

Occupation prepared for	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
Total reporting	**4,249**	**100.0**	**3,386**	**100.0**	**863**	**100.0**
Agriculture, fishing, and forestry	56	1.3	56	1.6	0	.0
Manufacturing and mechanical trades	3,447	81.1	3,076	90.8	371	43.0
Trade	18	.4	3	.1	15	1.7
Professional and semiprofessional service, and recreation and amusement	129	3.0	73	2.2	56	6.5
Domestic and personal service	424	10.0	29	.9	395	45.7
Clerical occupations	28	.7	6	.2	22	2.6
Operatives, laborers, and porters (except in stores)	147	3.5	143	4.2	4	.5

TABLE 26.—PRESENT OCCUPATIONS OF ALL PERSONS WHO RECEIVED THEIR TRAINING IN SCHOOLS FOR THE DEAF

Read the table as follows: Of 4,281 employed persons who had received their occupational training in schools for the deaf, 167, or 3.9 percent, were engaged in agriculture, fishing, or forestry at the time of the survey; 1,103, or 25.7 percent, in manufacturing or mechanical trades; etc. Read similarly for men and for women separately.

Present occupation	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
Total reporting	**4,281**	**100.0**	**3,412**	**100.0**	**869**	**100.0**
Agriculture, fishing, and forestry	167	3.9	166	4.9	1	.1
Manufacturing and mechanical trades	1,103	25.7	1,055	30.9	48	5.5
Transportation and communication	25	.6	24	.7	1	.1
Trade	89	2.1	67	2.0	22	2.5
Public service	8	.2	8	.2	0	.0
Professional and semiprofessional service, and recreation and amusement	362	8.5	247	7.3	115	13.2
Domestic and personal service	347	8.1	172	5.0	175	20.2
Clerical occupations	137	3.2	96	2.8	41	4.7
Managers (except in domestic and personal service), foremen, inspectors	26	.6	22	.7	4	.5
Operatives, laborers, and porters (except in stores)	2,017	47.1	1,555	45.5	462	53.2

TABLE 27.—DATA ON CERTAIN OCCUPATIONS WITH RESPECT TO (A) NUMBER PREPARED FOR EACH ONE IN SCHOOLS FOR THE DEAF; AND (B) NUMBER FOLLOWING EACH ONE AT TIME OF SURVEY (Considering only persons employed at time of survey)

Occupation	Number trained for occupation in school for deaf [1]		Number following occupation at time of survey [1]	
	Men	Women	Men	Women
1	2	3	4	5
Total number reporting	3,386	863	3,412	869
Compositors, linotypists, and typesetters	1,095	4	350	2
Carpenters	624	0	61	0
Shoemakers and cobblers (not in factory)	519	3	129	0
Cabinetmakers	286	0	44	0
Tailors and tailoresses in stores, shops, or factories	206	5	48	2
Bakers	133	1	49	2
Painters, glaziers, and varnishers (building)	106	0	60	0
Artists, sculptors, and teachers of art	29	6	9	1
Barbers, hairdressers, and manicurists	17	3	18	6
School teachers	15	30	135	56
Draftsmen	11	0	5	0
Domestic and personal servants	7	338	47	100
Dressmakers (not in factory)	7	355	2	38
Photographers	5	5	12	0
Social and welfare workers	----------	----------	42	48
Janitors	----------	----------	74	2

[1] The totals given in these 2 classifications represent essentially the same individuals. The slight discrepancy between the figures is to be explained by the fact that a few persons reporting training did not report the occupation for which trained. The totals do not represent the sums of the respective columns, since only occupations showing outstanding discrepancies are included here.

A study of data given in table 27 shows the apparent excess of training in certain specific occupations. The men reported as compositors were about one-third as many as the number trained for this work. Similarly, there were actually employed approximately one-tenth as many carpenters, three-eighths as many bakers, one-seventh as many cabinet makers, and one-fourth as many tailors and cobblers as there were persons trained for these specific occupations. On the other hand, the number of persons employed as teachers was more than four times the number reporting training in this field. This situation can probably be explained by two facts: (1) Many who are craftsmen or craftswomen by training make a place for themselves in teaching their trade in schools for the deaf; (2) most schools for the deaf do not prepare their students to become teachers;

such professional training is usually secured at some teacher-training institution, if at all, after graduation from a school for the deaf, and hence would in most cases not be listed here.

SUMMARY

1. The ability of the deaf and hard-of-hearing to make adjustment to a large variety of employment situations is demonstrated by the fact that more than 250 general occupational activities were reported in the survey. These are distributed among all the major occupational groups listed by the Bureau of the Census.

2. Both on the basis of the most recent positions held by those unemployed at the time of the survey and of the positions held by those employed at that time, it appears that about 40 percent of the men and 50 percent of the women were finding their occupational places in unskilled or semi-skilled fields.

3. Concentration in these fields is greater for those who were born deaf or became deaf at an early age than for those who became deaf in adulthood. It is also greater for those who were profoundly deaf than for those who could understand speech with or without an earphone.

4. As with the normally hearing, so with the deaf and hard-of-hearing there seems to be a positive correlation between degree of educational achievement and occupational level, as well as between occupational level and amount of earnings.

5. The data available indicate a disparity between the occupational training received in schools for the deaf and occupations actually followed in later life. On the one hand, an excess of training appears in certain time-honored crafts of mechanical nature, and on the other hand there is very extensive employment in certain fields for which no training is now offered.

CHAPTER 5: OCCUPATIONAL SUCCESS [1]

THE ABILITY to secure employment and the occupational level at which one is working are in themselves accepted measures of vocational achievement. These have been discussed in chapters 3 and 4. There are, however, other measures of success which are worthy of consideration, chief among which are: (1) The employer's rating; (2) prospects for promotion; and (3) earnings. Each of these will be analyzed in turn.

EMPLOYER'S ESTIMATE OF SUCCESS

General distribution.—What the employer thinks about one's work is a recognized element in determining occupational progress. Employers' ratings were available for 5,312 men and 2,271 women, who were employed either at the time of or previous to the survey. The distribution of ratings as given in table 28 is extremely gratifying. More than 50 percent of the total number were rated as succeeding very well in their occupational activities and more than 30 percent were succeeding fairly well. Less than 3 percent were considered failures. There is little difference in this respect between men and women.

TABLE 28.—DISTRIBUTION OF EMPLOYERS' RATINGS FOR 7,583 PERSONS

Employer's rating	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Succeeding very well	4,104	54.1	2,780	52.3	1,324	58.3
Succeeding fairly well	2,425	32.0	1,744	32.8	681	30.0
Getting by	850	11.2	650	12.3	200	8.8
Failing	204	2.7	138	2.6	66	2.9
Total	7,583	100.0	5,312	100.0	2,271	100.0

Relation to degree of hearing loss.—That success is common to both the deaf and the hard-of-hearing can be seen from the figures in table 29. While in the group of men who are

[1] This chapter was written with the collaboration of Helmer Myklebust and Sam D. Palmer, graduate students at Gallaudet College.

succeeding very well there is a moderately significant difference in favor of the profoundly deaf, as compared with the hard-of-hearing, the significance of this difference disappears when one combines the two success groups. Since the line of demarcation between *succeeding very well* and *succeeding fairly well* is indefinite and subject to errors of judgment, it seems quite reasonable to make this combination.

TABLE 29.—EMPLOYER'S ESTIMATE OF SUCCESS IN RELATION TO DEGREE OF HEARING LOSS

Read the table as follows: Of 5,309 men reporting the items concerned, 2,231 could understand loud speech without an earphone. Of these, 1,084, or 48.6 percent, were rated by their employers as succeeding very well; 772, or 34.6 percent, were rated as succeeding fairly well; etc. Read similarly for each group

Employer's estimate of success	Total		Ability to Understand Loud Speech					
			Without earphone		Only with earphone		Cannot hear at all	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reported	5,309	2,270	2,231	1,135	214	126	2,864	1,009
Succeeding very well	2,778	1,324	1,084	683	98	72	1,596	569
Succeeding fairly well	1,743	680	772	329	72	38	899	313
"Getting by"	650	200	300	89	37	14	313	97
Failing	138	66	75	34	7	2	56	30
PERCENT DISTRIBUTION								
Succeeding very well			48.6	60.2	45.8	57.1	55.7	56.4
Succeeding fairly well			34.6	29.0	33.6	30.1	31.4	31.0
"Getting by"			13.4	7.8	17.3	11.1	10.9	9.6
Failing			3.4	3.0	3.3	1.7	2.0	3.0

Nevertheless, the fact that ratings of *succeeding very well* are assigned to profoundly deaf men in greater proportion than to the hard-of-hearing is suggestive of the deduction that has already been offered for consideration, namely, that many hard-of-hearing persons attempt to disregard the fact that there is any hearing loss at all, and as a result get into difficulties. It is interesting to note in

connection with the present item that this does not apply to the women of the group, since the percentage of hard-of-hearing women who are succeeding very well exceeds the percentage of profoundly deaf, though not to a significant extent.

Relation to means of communication.—Again, the means of communication between employer and employee (as given in table 30) does not appear for the men to have any significant influence upon the employer's rating. The combined percentages of those who are "succeeding very well" and "succeeding fairly well" range from 84.1 to 86.4, regardless of whether they use writing, gestures, or spoken language. Failures, too, are similar for all groups. For women there seems to be a greater advantage in favor of those who use spoken language. This is consistent with the findings already noted in connection with table 29. It also has some relationship, no doubt, to the types of occupations open to women.

TABLE 30.—EMPLOYER'S ESTIMATE OF SUCCESS IN RELATION TO MEANS OF COMMUNICATION WITH EMPLOYER

NOTE.—For directions for reading table, see table 29

Employers' estimate of success	Total		Means of Communication					
			Writing		Signs, gestures, manual alphabet		Spoken language	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reported	5,228	2,239	1,693	462	924	338	2,611	1,439
Succeeding very well	2,733	1,307	912	242	497	190	1,324	875
Succeeding fairly well	1,711	670	551	147	287	107	873	416
"Getting by"	643	197	189	58	121	32	333	107
Failing	141	65	41	15	19	9	81	41
PERCENT DISTRIBUTION								
Succeeding very well			53.9	52.4	53.8	56.2	50.7	60.8
Succeeding fairly well			32.5	31.8	31.1	31.7	33.4	29.0
"Getting by"			11.2	12.6	13.1	9.5	12.8	7.4
Failing			2.4	3.2	2.0	2.6	3.1	2.8

Evidently employers were rating their employees on the basis of efficiency in the operations involved in a particular occupation. Degree of hearing loss and means of communication have a definite part in determining choice or availability of particular occupations, but after these factors have exerted their due influence in this direction, chances of success seem to be open to all. Appreciation of work well done is in accordance with the requirements of the job.

TABLE 31.—EMPLOYER'S ESTIMATE OF SUCCESS IN RELATION TO HIGHEST LEVEL OF SCHOOL WORK REACHED

NOTE.—For directions for reading table, see table 29

Employer's estimate of success	Total		Highest Level of School Work Reached							
			None		Elementary		High school		College	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11
NUMBER DISTRIBUTION										
Total reported	5,321	2,265	37	7	2,748	871	1,996	977	540	410
Succeeding very well	2,768	1,319	16	4	1,370	464	1,054	573	328	278
Succeeding fairly well	1,736	678	14	0	887	285	686	291	149	102
"Getting by"	649	200	6	2	387	97	202	79	54	22
Failing	168	68	1	1	104	25	54	34	9	8
PERCENT DISTRIBUTION										
Succeeding very well			43.2	57.1	49.9	53.3	52.8	58.6	60.7	67.8
Succeeding fairly well			37.8	.0	32.3	32.7	34.4	29.8	27.6	24.9
"Getting by"			16.2	28.6	14.0	11.1	10.1	8.1	10.0	5.4
Failing			2.7	14.3	3.8	2.9	2.7	3.5	1.7	1.9

Relation to education.—More definite seems to be the relation between employer's rating of success and the education of the employee, as shown in table 31. Except for the group of women who did not attend school at all (which is so small that it can safely be disregarded) the tendency is quite consistent. Chances of success, as measured by the employer's estimate, increase with the number of school grades completed. Particularly do persons of some collegiate training appear to have the advantage for outstanding success in whatever occupation they are found. It should

be noted, by reference to table 23 in chapter 4, that college men and women included in this survey were engaged in every one of the 10 major occupational classes, although they were most apparent in the professional and semi-professional group. No doubt the effects of the depression contributed to this situation, forcing many of them to accept positions below their actual capabilities.

Relation to occupation followed.—Of all persons for whom employers' estimates of success were available, 3,458 men and 1,448 women were employed at the time of the survey. How the employer's rating is related to the occupation followed by these persons is shown in table 32. It may be a matter of regret that the figures do not differentiate more clearly among the various occupations, for such differentiation, if reliable, would help materially in the problem of guidance. If certain types of work were outstanding for the percentage of success or failure reported by employers, they would naturally become points of departure for vocational counseling.

Most of the totals in table 32 representing the number employed in specific occupations are too small for statistical analysis. However, it is of interest to note that when the two degrees of positive success are combined, the field of trade scores lowest for both men and women, the percentages being 81.6 and 80.8 for the respective sexes. Other fields scoring less than 90 percent of success are, for men, agriculture, transportation and communication, public service, and domestic and personal service; for women, agriculture. The number of women in this and in certain other fields is so small, however, that little significance can be attached to the differences in percentages.

Relation to source of training.—It has been shown in chapter 3 (p. 36) that the place of occupational training made little difference in the employment status of the individual at the time of the survey. Schools for the deaf and public high or trade schools contribute about equally of their numbers to the employment ranks. But individuals who had had no occupational training at all fell far below either of the other two groups in the proportion of their number employed.

TABLE 32.—EMPLOYER'S ESTIMATE OF SUCCESS IN RELATION TO PRESENT OCCUPATION

Read the table as follows: Of 3,458 men employed at the time of the survey, 78 were engaged in agriculture, fishing, or forestry. Of these, 34, or 43.6 percent, were rated by their employers as succeeding very well; 31, or 39.7 percent, were succeeding fairly well, etc. Read similarly for each occupational group for men and women, respectively.

Present occupation	Total		Employers' Estimate of Skill							
			Succeeding very well		Succeeding fairly well		"Getting by"		Failing	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11
NUMBER DISTRIBUTION										
Total reported	3,458	1,448	2,039	935	1,072	405	304	93	43	15
Agriculture, fishing, and forestry	78	3	34	2	31	0	12	1	1	0
Manufacturing and mechanical trades	923	81	548	48	293	26	71	7	11	0
Transportation and communication	55	2	32	2	16	0	7	0	0	0
Trade	147	47	78	24	42	14	20	7	7	2
Public service	33	2	22	2	7	0	4	0	0	0
Professional and semiprofessional service, and recreation and amusement	304	318	208	233	75	72	21	10	0	3
Domestic and personal service	214	273	101	177	76	78	30	16	7	2
Clerical occupations	223	216	144	139	57	61	19	15	3	1
Managers (except in domestic and personal service), foremen, inspectors	81	10	65	8	12	1	3	1	1	0
Operatives, laborers, and porters (except in stores)	1,400	496	807	300	463	153	117	36	13	7
PERCENT DISTRIBUTION										
Agriculture, fishing, and forestry	100.0	100.0	43.6	66.7	39.7	0.0	15.4	33.3	1.3	0.0
Manufacturing and mechanical trades	100.0	100.0	59.3	59.3	31.8	32.1	7.7	8.6	1.2	.0
Transportation and communication	100.0	100.0	58.2	100.0	29.1	.0	12.7	.0	.0	.0
Trade	100.0	100.0	53.0	51.0	28.6	29.8	13.6	14.9	4.8	4.3
Public service	100.0	100.0	66.7	100.0	21.2	.0	12.1	.0	.0	.0
Professional and semiprofessional service, and recreation and amusement	100.0	100.0	68.4	73.3	24.7	22.7	6.9	3.1	.0	.9
Domestic and personal service	100.0	100.0	47.2	64.8	35.5	28.6	14.0	5.9	3.3	.7
Clerical occupations	100.0	100.0	64.6	64.4	25.6	28.2	8.5	6.9	1.3	.5
Managers (except in domestic and personal service), foremen, inspectors	100.0	100.0	80.3	80.0	14.8	10.0	3.7	10.0	1.2	.0
Operatives, laborers, and porters (except in stores)	100.0	100.0	57.6	60.5	33.1	30.8	8.4	7.3	.9	1.3

Further study of this item in relation to the employer's estimate of success brings out the point (as shown in table 33) that neither type of school can claim any great advantage over the other. Moreover, even persons who had had no occupational training whatever made a very creditable showing in comparison with other groups. Particularly is this true of women having no training as compared with those trained in schools for the deaf. Whether this is due to errors of rating, to the need of improvement in training methods, to types of occupations followed, or to the superiority of the group having no training is a problem that should be carefully studied.

TABLE 33.—EMPLOYER'S ESTIMATE OF SUCCESS IN RELATION TO SOURCE OF OCCUPATIONAL TRAINING

NOTE.—For directions for reading table, see table 29

Employer's estimate of success	Total		Place of trade training					
			None		Public high or trade school		School for deaf	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reported	5,282	2,249	2,021	789	630	655	2,628	805
Succeeding very well	2,768	1,308	967	437	353	418	1,448	453
Succeeding fairly well	1,731	678	691	235	193	180	847	263
"Getting by"	646	197	287	86	71	44	288	67
Failing	137	66	79	31	13	13	45	22
PERCENT DISTRIBUTION								
Succeeding very well			47.8	55.4	56.0	63.8	55.1	56.3
Succeeding fairly well			34.1	29.8	30.6	27.5	32.2	32.7
"Getting by"			14.2	10.9	11.3	6.7	11.0	8.3
Failing			3.9	3.9	2.1	2.0	1.7	2.7

PROSPECTS FOR PROMOTION

Every ambitious worker looks to the time when he may receive recognition of work well done through assignment to a higher position or through increase of salary, or both. Economic conditions have been a recognized obstacle to economic rewards of merit during recent years, and this

fact has no doubt influenced the findings to be presented next. Yet the facts should be known and studied in their relation to the occupational activities of the deaf and hard-of-hearing.

General distribution.—It will be remembered that employers' ratings of deaf and hard-of-hearing employees, as given in table 28, showed an exceptionally high degree of success. One should contrast the figures on this point with those depicting the employees' prospects for promotion, as given in table 34. More than 70 percent of those for whom data are available for either present or most recent position had no prospects whatever of any change for the better in their occupational status. For only 8 percent were the prospects for promotion reported to be "excellent", and for about 21 percent they were "fair."

This apparent paradox can probably be explained without much difficulty. In the first place, employers may have been generous in rating the success of the workers. In the second place they may have been quite willing to give credit for work well done on one plane without admitting the possibility of advancement to a higher plane. Whether such a reaction was due to prejudice or to actual inability of the handicapped worker to make further progress in the business is not here determined. Possibly both factors entered the picture. At any rate the facts presented here are not favorable to promotion-prospects for the group as a whole.

TABLE 34.—DISTRIBUTION OF EMPLOYERS' ESTIMATES OF PROSPECTS FOR PROMOTION

Employee's prospects for promotion	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Excellent	408	8.1	246	7.0	162	10.5
Fair	1,071	21.2	763	21.8	308	20.0
None	3,564	70.7	2,491	71.2	1,073	69.5
Total reported	5,043	100.0	3,500	100.0	1,543	100.0

Relation to degree of hearing loss.—That degree of hearing loss is not an important factor in determining prospects for promotion is evident from table 35. Even the apparent advantage in favor of women who are hard-of-hearing over those who are profoundly deaf is not statistically significant, for the difference between the two percentages indicating "excellent prospects" is less than three times the standard error of the difference. Hard-of-hearing women, however, who can hear loud speech without an earphone, do appear to have greater prospects for promotion than hard-of-hearing men of the same general degree of hearing loss, the difference between the two percentages representing "excellent prospects" (13.4 for women and 7.8 for men) being statistically reliable.

TABLE 35.—PROSPECTS FOR PROMOTION IN RELATION TO DEGREE OF HEARING LOSS

NOTE.—For directions for reading this table, see table 29

Employee's prospects for promotion	Total		Ability to Understand Loud Speech					
			Without earphone		Only with earphone		Not at all	
	Men	Women	Men	Women	Men	Women	Men	Women
NUMBER DISTRIBUTION								
Total reported	3,497	1,543	1,265	714	136	80	2,096	749
Excellent prospects	244	174	98	96	11	8	135	70
Fair prospects	763	315	286	139	28	11	449	165
No prospects	2,490	1,054	881	479	97	61	1,512	514
PERCENT DISTRIBUTION								
Excellent prospects			7.8	13.4	8.1	10.0	6.5	9.4
Fair prospects			22.6	19.5	20.6	13.7	21.4	22.0
No prospects			69.6	67.1	71.3	76.3	72.1	68.6

Relation to means of communication.—According to table 36, deaf persons who need to resort to writing are at the greatest disadvantage with reference to prospects for promotion. Neither of the other two general means of communication seems to have any advantage over the other within the same sex group. But women who use spoken language again have significantly greater prospects for pro-

motion than do men in the corresponding classification. In this respect, the findings are consistent with those presented in table 35.

TABLE 36.—PROSPECTS FOR PROMOTION IN RELATION TO MEANS OF COMMUNICATION WITH EMPLOYER

NOTE.—For directions for reading table, see table 29

Employee's prospects for promotion	Total		Means of Communication					
			Writing		Signs, gestures, manual alphabet		Spoken language	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reported	3,433	1,513	1,136	304	720	279	1,527	930
Excellent prospects	236	169	50	8	59	34	127	127
Fair prospects	742	305	227	64	163	59	352	182
No prospects	2,455	1,039	909	232	498	186	1,048	621
PERCENT DISTRIBUTION								
Excellent prospects			4.2	2.6	8.2	12.2	8.3	13.6
Fair prospects			19.1	21.1	22.6	21.1	23.1	19.6
No prospects			76.7	76.3	69.2	66.7	68.6	66.8

Relation to education.—Once more education is shown to have a positive relationship to progress. The trend shown in table 37 is unmistakable. As education increases, the prospects for promotion increase consistently and to a significant degree. But again there are undoubtedly common factors underlying both educational progress and prospects for promotion which contribute to the correlation.

Relation to occupation followed.—Next, we inquire in which occupations prospects for promotion seem most favorable. The data given in table 38 are based upon the same general group which the figures of table 32 represent, being limited to persons employed at the time of the survey. Yet the percentages in the respective classifications with reference to promotion are almost identical with those for the somewhat larger group represented in table 34, which

gives the general distribution of prospects of promotion, including those whose employment terminated previous to the survey. The consistency of the findings of the whole investigation is thus again demonstrated.

TABLE 37.—PROSPECTS FOR PROMOTION IN RELATION TO HIGHEST LEVEL OF SCHOOL WORK REACHED

NOTE.—For directions for reading table, see table 29

Employee's prospects for promotion	Total		Highest Level of School Work Reached							
			None		Elementary		High school		College	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11
NUMBER DISTRIBUTION										
Total reported	3,485	1,537	21	4	1,716	573	1,333	641	415	319
Excellent prospects	254	172	1	0	73	45	118	68	62	59
Fair prospects	760	314	3	0	334	109	313	130	110	75
No prospects	2,471	1,051	17	4	1,309	419	902	443	243	185
PERCENT DISTRIBUTION										
Excellent prospects			4.8	0.0	4.3	7.9	8.8	10.6	14.9	18.5
Fair prospects			14.3	.0	19.5	19.0	23.5	20.3	26.5	23.5
No prospects			80.9	100.0	76.2	73.1	67.7	69.1	58.6	58.0

As stated in connection with table 32, the number of persons reported for most of the occupational fields listed is too small to analyze statistically; yet it is suggestive that in the group of operatives and laborers, which contains by far the largest number of both men and women, from 75 to 80 percent had no prospects for promotion, although in the same group more than 90 percent (as shown in table 32) were rated by their employers as "succeeding very well" or "succeeding fairly well." Other fields in which the percentage of "no prospects" is disproportionately large are: Agriculture, for both men and women; manufacturing and mechanical trades, for women; and domestic and personal service, for both men and women.

TABLE 38.—PROSPECTS FOR PROMOTION IN RELATION TO PRESENT OCCUPATION

NOTE.—For directions for reading the table, see table 32

Present occupation	Total		Prospects for promotion					
			None		Fair		Excellent	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reported	3,222	1,391	2,276	964	716	277	230	150
Agriculture, fishing, and forestry	70	3	57	3	13	0	0	0
Manufacturing and mechanical trades	849	72	564	61	228	10	57	1
Transportation and communication	49	2	36	2	12	0	1	0
Trade	135	46	89	32	29	8	17	6
Public service	31	2	23	1	6	0	2	1
Professional and semiprofessional service, and recreation and amusement	299	311	158	173	81	73	60	65
Domestic and personal service	265	262	167	214	32	26	6	22
Clerical occupations	214	211	120	112	70	69	24	30
Managers (except in domestic and personal service), foremen, inspectors	75	10	47	8	11	2	17	0
Operatives, laborers, and porters (except in stores)	1,295	472	1,015	358	234	89	46	25
PERCENT DISTRIBUTION								
Agriculture, fishing, and forestry	100.0	100.0	81.4	100.0	18.6	0.0	0.0	0.0
Manufacturing and mechanical trades	100.0	100.0	66.4	84.7	26.9	13.9	6.7	1.4
Transportation and communication	100.0	100.0	73.5	100.0	24.5	.0	2.0	.0
Trade	100.0	100.0	65.9	69.6	21.5	17.4	12.6	13.0
Public service	100.0	100.0	74.2	50.0	19.4	.0	6.4	50.0
Professional and semiprofessional service and recreational amusement	100.0	100.0	52.8	55.6	27.1	23.5	20.1	20.9
Domestic and personal service	100.0	100.0	81.5	81.7	15.6	9.9	2.9	8.4
Clerical occupations	100.0	100.0	56.1	53.1	32.7	32.7	11.2	14.2
Managers (except in domestic and personal service), foremen, inspectors	100.0	100.0	62.6	80.0	14.7	20.0	22.7	.0
Operatives, laborers, and porters (except in stores)	100.0	100.0	78.4	75.8	18.1	18.9	3.5	5.3

On the other hand, the professional and semi-professional group has a fairly high standing for both men and women, 20 percent of those employed in this classification having "excellent prospects" for promotion. The figures for clerical

and trade occupations are also somewhat more encouraging for both sexes than are those for other fields. Probably the nature of these occupations contributes to the opportunities for promotion much more than do the unskilled, semi-skilled, or even skilled activities in factory, field, or home. It has also been shown that the educational qualifications of persons in these fields seem to have some bearing upon the matter. On the whole, however, it appears that the average deaf or hard-of-hearing worker included in this survey had not much prospect for advancement beyond the level at which he was working when the survey was made.

TABLE 39.—PROSPECTS FOR PROMOTION IN RELATION TO SOURCE OF OCCUPATIONAL TRAINING

NOTE.—For directions for reading table, see table 29

Employee's prospects for promotion	Total		Source of Occupational Training					
			No occupational training		Public high or trade school		School for deaf	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reported	3,486	1,526	1,140	473	398	448	1,948	605
Excellent prospects	245	172	67	32	46	77	132	63
Fair prospects	760	308	211	87	119	90	430	131
No prospects	2,481	1,046	862	354	233	281	1,386	411
PERCENT DISTRIBUTION								
Excellent prospects			5.9	6.8	11.6	17.2	6.8	10.4
Fair prospects			18.5	18.4	29.9	20.1	22.1	21.7
No prospects			75.6	74.8	58.5	62.7	71.1	67.9

Relation to source of training.—We have seen in table 33 that the employer's estimate of success seemed not to have been closely related to the type of school in which occupational training was received, nor even to the existence of any occupational training at all. Only slightly more significant seems to be the connection between source of training and prospects for promotion, as shown in table 39.

While the figures are suggestive of the fact that persons having had no trade training are at a disadvantage in comparison with those trained in schools for the deaf, the differences in percentages are not large enough to be reliable.

More significant is the advantage that public high or trade schools seem to have over schools for the deaf, but this may be influenced by extraneous factors, such as the degree of hearing loss and the age at which hearing loss came on. Persons educated in public high or trade schools have had extensive associations in the hearing world. Most of them have had more experience in speech than their fellows who have been educated in schools for the deaf. Their background is broader. If, upon the occurrence of deafness, they make adjustment to their handicap which is at all adequate, it seems reasonable to suppose that they might have an advantage in occupational advancement over those who have been more or less isolated among their own kind.

PRESENT EARNINGS

Since in the life of any person the amount of return received for his services is a matter of very practical moment, it is important to consider in connection with this survey the earning capacity of the persons concerned. Of the 10,497 individuals who were employed at the time of the investigation, 10,230 reported their weekly earnings. For 4,880 of these information was also secured from their employers. Hence it is possible to make certain comparisons and analyses with reference to the wages of the sampling and related factors.

General distribution.—In table 40 are given two distributions of the weekly earnings of persons employed at the time of the survey: (1) Of 10,230 persons reporting their own earnings; and (2) of 4,880 of these whose earnings were also reported by their employers. The general agreement of the percentage distributions of the data from these two sources may be considered an index of the reliability of the information secured. The whole picture is one of wages which are predominantly in the lower brackets. More than half of the persons in the sampling were receiving less than $20 per week and more than four-fifths of them

were receiving less than $30. The median wage for the entire group was little more than $18.

TABLE 40.—DISTRIBUTION OF WEEKLY EARNINGS[1] OF PERSONS EMPLOYED AT TIME OF SURVEY

Weekly earnings	Employees' report		Employers' report	
	Number	Percent	Number	Percent
1	2	3	4	5
$50 or more	567	5.5	143	2.9
$40–$49	428	4.2	215	4.3
$30–$39	1,013	10.0	522	10.6
$20–$29	2,340	22.8	1,268	25.9
$10–$19	3,999	39.1	2,057	42.1
Less than $10	1,883	18.4	675	14.2
Total	10,230	100.0	4,880	100.0

[1] Including cost of board and room if these were a part of the wages earned.

This situation is not surprising after one has considered the data already presented in chapter 4. The unskilled and semiskilled occupations in which approximately 50 percent of the group were engaged do not demand high wages. It has also been shown (in table 24) that, among the persons reporting both weekly earnings and occupation followed, the wages increased consistently with the occupational level, until of the professional or semiprofessional group more than one-fourth reported weekly earnings of $40 or more. There are other relationships which should be considered in this connection, and these will be the subject matter of the remainder of the present chapter.

Relation to sex.—Little need be said on this item save to point out that with deaf and hard-of-hearing persons, as with the normally hearing, the wage scale for women is on the whole lower than for men. Table 41 shows the facts as they were reported by the employees themselves. The median wage for the men was $19.67 and for the women $15.02 per week.

Relation to age.—Table 42 shows the relationship between earnings and the age of the employee. For the men the peak of earning capacity fell between the ages of 40 and 49 years, the median wage at that point being $22.30. Their mini-

mum earning power came during youth, between the years of 16 and 19, the median wage for that period being $9.27.

TABLE 41.—PRESENT EARNINGS IN RELATION TO SEX

Weekly earnings	Men		Women	
	Number	Percent	Number	Percent
1	2	3	4	5
$50 or more	504	7.0	63	2.1
$40–$49	345	4.8	83	2.7
$30–$39	854	11.9	159	5.2
$20–$29	1,809	25.1	531	17.5
$10–$19	2,630	36.6	1,369	45.1
Less than $10	1,052	14.6	831	27.4
Total number reporting	7,194	100.0	3,036	100.0

The women reached the peak of their earning power some years earlier than did the men, their high point lying between the years of 30 and 39. The median wage during that period was $16.53. The low point for the women was in old age, beyond 60 years, when the median wage earned was $10.76. The whole picture is in general consistent with what is generally known about the earning capacity of men and women, particularly in the industrial fields which are so largely represented here. Wages rise with each succeeding decade until the peak is reached and then taper off again in decreasing returns with the approach and passing of middle age when physical strength and skill begin to wane.

Relation to degree of hearing loss.—If, as has been shown in chapter 4, degree of hearing loss has a definite relationship to occupational level, one would expect that it bears the same relationship to earnings. That this is true is shown in table 43. For both sexes, those who are profoundly deaf earn less money than those who can hear with or without a hearing aid. It is interesting to note that the men who use a hearing aid earn slightly more than those who can "understand loud speech without an earphone." Because of the small number in the former classification, however, this difference does not prove to be statistically reliable.

TABLE 42.—PRESENT EARNINGS IN RELATION TO AGE

NOTE.—For directions for reading this table, see table 29.

Weekly earnings	Total		Age in Years											
			16–19		20–29		30–39		40–49		50–59		60+	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
NUMBER DISTRIBUTION														
Total reporting	7,184	3,009	76	69	1,285	781	1,775	741	1,735	698	1,281	475	1,032	245
$50 or more	502	63	0	0	7	2	80	10	144	23	148	18	123	10
$40 to $49	344	82	0	0	18	3	79	16	111	31	77	21	61	11
$30 to $39	854	158	0	0	81	15	239	50	255	59	179	27	100	7
$20 to $29	1,805	522	4	1	280	109	523	173	464	133	293	78	241	28
$10 to $19	2,628	1,357	31	39	638	465	678	350	557	252	400	179	324	72
Less than $10	1,051	827	41	29	261	187	176	142	204	200	186	152	183	117
PERCENT DISTRIBUTION														
$50 or more			0.0	0.0	0.5	0.3	4.5	1.4	8.3	3.2	11.6	3.8	11.9	4.1
$40 to $49			.0	.0	1.4	.4	4.4	2.2	6.4	4.5	5.8	4.4	5.9	4.5
$30 to $39			.0	.0	6.3	1.9	13.5	6.7	14.7	8.4	14.0	5.7	9.7	2.9
$20 to $29			5.3	1.5	21.8	14.0	29.5	23.3	26.7	19.0	22.9	16.4	23.4	11.4
$10 to $19			40.8	56.5	49.7	59.5	38.2	47.2	32.1	36.1	31.2	37.7	31.4	29.3
Less than $10			53.9	42.0	20.3	23.9	9.9	19.2	11.8	28.8	14.5	32.0	17.7	47.8

TABLE 43.—PRESENT EARNINGS IN RELATION TO DEGREE OF HEARING LOSS

NOTE.—For directions for reading this table, see table 29

Weekly earnings	Total		Degree of Hearing Loss					
			Understand loud speech without ear-phone		Understand loud speech with ear-phone		Cannot understand speech at all	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reporting	7,186	3,034	3,123	1,700	324	189	3,739	1,145
$50 or more	505	63	350	54	50	5	105	4
$40 to $49	345	83	187	62	17	12	141	9
$30 to $39	856	159	387	124	47	11	422	24
$20 to $29	1,804	531	717	370	65	33	1,022	128
$10 to $19	2,627	1,367	1,028	618	99	75	1,500	644
Less than $10	1,049	831	454	442	46	53	549	336
PERCENT DISTRIBUTION								
$50 or more			11.1	3.2	15.4	2.6	2.8	0.4
$40 to $49			6.0	3.6	5.2	6.3	3.7	0.8
$30 to $39			12.4	7.3	14.5	5.8	10.3	2.2
$20 to $29			23.0	21.8	20.2	17.5	26.5	11.1
$10 to $19			32.9	38.1	30.5	39.7	40.3	56.3
Less than $10			14.6	26.0	14.2	28.1	16.4	29.2

Relation to education.—Unmistakable again is the significance of the educational factor and of what it stands for in occupational success. In table 44 the trend toward higher wages with increased educational achievement is very clear.[1] The medians of weekly earnings for the respective groups are:

Highest level reached	Men	Women
Never attended school	$14.12	$12.00
Elementary school	18.04	13.23
Junior high school	18.59	14.04
Senior high school	21.03	16.79
Junior college	26.43	19.22
College or university	34.53	24.88

[1] See also table 24 for relationship between occupation followed and earnings.

TABLE 44.—PRESENT EARNINGS IN RELATION TO HIGHEST LEVEL OF SCHOOL WORK REACHED

NOTE.—For directions for reading this table, see table 29

NUMBER DISTRIBUTION

Weekly earnings	Total		Highest Level of School Work Reached											
			None		Elementary		Junior high		Senior high		Junior college		College or university	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total reporting	7,166	3,032	38	8	3,553	1,121	1,325	509	1,301	803	230	177	719	414
$50 or more	490	63	0	0	97	3	60	7	106	13	25	7	212	33
$40 to $49	347	83	1	0	121	4	54	3	69	14	19	12	83	50
$30 to $39	848	185	3	0	335	18	139	14	202	73	51	20	118	60
$20 to $29	1,807	578	5	0	940	129	341	82	305	197	56	45	160	125
$10 to $19	2,621	1,331	17	5	1,446	601	556	249	447	326	57	58	98	92
Less than $10	1,053	792	12	3	614	366	185	154	172	180	22	35	48	54

PERCENT DISTRIBUTION

$50 or more	2.6	0.0	2.7	0.2	3.3	1.3	8.0	1.6	10.8	3.9	29.4	7.9
$40 to $49	2.6	.0	3.4	.3	4.3	.6	6.2	1.7	8.2	7.7	11.6	12.1
$30 to $39	7.6	.0	9.5	1.5	10.5	2.8	15.3	9.1	22.2	11.2	16.5	14.5
$20 to $29	12.8	.0	26.4	11.4	25.8	16.1	23.9	24.6	24.4	25.2	22.2	30.1
$10 to $19	43.6	62.5	40.7	53.5	42.1	48.9	33.6	40.6	24.8	32.5	13.6	22.2
Less than $10	30.8	37.5	17.3	33.1	14.0	30.3	13.0	22.4	9.6	19.5	6.7	13.2

Relation to training factors.—Finally, we consider once more the source of training, as well as the extent of following the occupation for which training was received, and their relationship to earning power. Table 45 points to a rather definite advantage for persons trained in public high or trade schools, with little difference on the whole existing between those reporting no occupational training and those trained in schools for the deaf. Again, however, the advantage attached to attendance at public high or trade school must not be interpreted as necessarily reflecting upon the quality of occupational training as given in schools for the deaf. The group attending public high or trade school no doubt includes the hard-of-hearing, and it has been shown (in table 43) that degree of hearing loss seems to have a significant influence upon earning power.

TABLE 45.—PRESENT EARNINGS IN RELATION TO SOURCE OF OCCUPATIONAL TRAINING

NOTE.—For directions for reading this table, see table 29

Weekly earnings	Total		Source of Occupational Training					
			No occupational training		In public high or trade school		In school for deaf	
	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9
NUMBER DISTRIBUTION								
Total reporting	7,144	3,008	2,695	1,163	1,065	973	3,384	872
$50 or more	501	63	208	18	205	43	88	2
$40 to $49	344	82	126	14	75	64	143	4
$30 to $39	855	153	310	36	171	100	374	17
$20 to $29	1,791	523	634	151	227	291	930	86
$10 to $19	2,610	1,359	956	529	269	311	1,385	519
Less than $10	1,043	823	461	415	118	164	464	244
PERCENT DISTRIBUTION								
$50 or more			7.7	1.5	19.2	4.3	2.6	0.2
$40 to $49			4.7	1.2	7.0	6.6	4.2	.5
$30 to $39			11.5	3.1	16.1	10.3	11.1	1.9
$20 to $29			23.5	13.0	21.3	29.9	27.5	9.8
$10 to $19			35.5	45.5	25.3	32.0	40.9	59.6
Less than $10			17.1	35.7	11.1	16.9	13.7	28.0

Table 46 deals only with those trained in schools for the deaf and is an attempt to discover the relationship between earnings and the degree of following the occupation for which one has been trained in such a school. The number who had received no occupational training is, for both men and women, so small that it is disregarded in the statistical analysis. For the remaining groups, with the exception of those who had followed their training altogether, there seems little difference in earning power. The medians of weekly earnings are as follows:

	Men	Women
Did not follow occupational training at all	$18.02	$13.89
Followed occupational training to small extent	18.25	13.66
Followed occupational training to large extent	17.91	13.61
Followed occupational training altogether	22.92	14.32

TABLE 46.—PRESENT EARNINGS IN RELATION TO EXTENT TO WHICH OCCUPATIONAL TRAINING WAS FOLLOWED

(Only for those trained in a school for the deaf)

NOTE.—For directions for reading this table see table 29

Weekly earnings	Total		Extent to which occupational training was followed									
			No occupational training		Not at all		To small extent		To large extent		Altogether	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
1	2	3	4	5	6	7	8	9	10	11	12	13
NUMBER DISTRIBUTION												
Total reporting	3,200	821	5	3	1,522	336	511	132	376	137	786	213
$50 or more	84	2	0	0	27	0	8	1	13	0	36	1
$40 to $49	135	4	0	0	47	1	16	0	13	1	59	2
$30 to $39	348	19	1	0	116	3	45	1	38	1	148	14
$20 to $29	888	90	2	0	439	31	147	12	88	16	212	31
$10 to $19	1,305	483	2	1	666	218	226	82	172	79	239	103
Less than $10	440	223	0	2	227	83	69	36	52	40	92	62
PERCENT DISTRIBUTION												
$50 or more			0.0	0.0	1.8	0.0	1.6	0.8	3.5	0.0	4.6	0.5
$40 to $49			.0	.0	3.1	.3	3.1	.0	3.4	.7	7.5	.9
$30 to $39			20.0	.0	7.6	.9	8.8	.7	10.1	.7	18.9	6.6
$20 to $29			40.0	.0	28.8	9.2	28.8	9.1	23.4	11.7	26.9	14.5
$10 to $19			40.0	33.3	43.8	64.9	44.2	62.1	45.8	57.7	30.4	48.4
Less than $10			.0	66.7	14.9	24.7	13.5	27.3	13.8	29.2	11.7	29.1

In chapter 3 it was pointed out that persons in the sampling who had followed their occupational training exclusively had a moderate advantage in securing and keeping employment. And now it appears that they also have a moderate advantage in commanding wages. Conjectures as to why this should be involve the character of the trainee as well as the choice of the occupation. Both are important considerations in developing a program of guidance and occupational training in schools for the deaf.

SUMMARY

Occupational success has been studied in this survey as reflected in (1) employers' ratings; (2) prospects for promotion; and (3) earnings. The facts brought to light from these three points of view should be considered together. Prominent among them are the following:

1. According to employers' estimates, 85 percent of the employees rated were successful in their work, more than 50 percent being rated as "succeeding *very* well."

2. On the other hand, more than 70 percent of those for whom this item was reported for their employers had no prospects whatever for promotion. Only 8 percent were accorded excellent prospects.

3. The median weekly earnings of those employed at the time of the survey were approximately $18. About 10 percent earned $40 or more per week, while 57 percent received less than $20.

4. Employers' estimates of success vary significantly with the amount of education of the employee. So also prospects for promotion and earnings increase as the highest level of school work reached increases.

5. In the light of these findings, it is not surprising that those engaged in professional or semiprofessional pursuits are found in the higher categories of earning power and promotion prospects, since their educational preparation reaches a higher level.

6. Persons trained in public high or trade schools seem to have an advantage in prospects for promotion and in earning power over those trained in schools for the deaf.

Extraneous factors, such as degree of hearing loss and age at which deafness occurred, probably need to be considered as contributory to this finding.

7. Among those trained in schools for the deaf, there seems little relationship between earning power and the extent to which occupational training was followed. A slight advantage, however, characterizes those who have followed exclusively the field for which they were prepared.

CHAPTER 6: EMPLOYERS' STATEMENTS

DATA HAVE already been presented regarding employers' estimates of the success of deaf and hard-of-hearing employees and of their prospects for promotion. It was found that while about 85 percent were, according to employers' statements, succeeding in their work, more than 70 percent had no prospects whatever for promotion. Further light upon the attitude of employers was sought through other items of the questionnaire, as well as through the opportunity given to record their comments on any particular phase of the problem which was of interest to them.

EDUCATIONAL REQUIREMENTS FOR POSITIONS HELD

For 7,610 persons, employers' statements were secured indicating the highest level of school work required by them for the positions held. The results, as given in table 47, are not surprising in the light of the types of occupations followed by the individuals included in the sampling. For about 25 percent high-school graduation was considered essential and for 6 percent a college education was necessary. These percentages no doubt correspond to the professional and semiprofessional types of work found in the sampling. On the other hand, in about one-third of the cases the position held was of such a character that the employers indicated the need of no regular education at all. Obviously these included unskilled labor and other types of service in which the function of education was not apparent to the employer. It must be questioned, however, whether when they answered in this way employers realized the true value of an elementary education even in these levels of occupational activity. Because a worker does not use ordinary academic skills in the course of performing his job can scarcely be accepted as a reason for his not needing the elements of an education which bring to him the socializing influences of school experiences. However, the fact remains that for the actual jobs performed, school training seemed to the employer in these cases to be unnecessary.

TABLE 47.—GENERAL EDUCATIONAL REQUIREMENTS FOR POSITION, ACCORDING TO EMPLOYER

Educational requirements for positions	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Total reported	7,610	100.0	5,337	100.0	2,273	100.0
College or university	477	6.2	269	5.0	208	9.1
High school	1,303	17.1	783	14.7	520	22.9
Elementary school	3,269	43.0	2,423	45.4	846	37.2
No educational requirements	2,561	33.7	1,862	34.9	699	30.8

REQUIREMENTS OF TRADE TRAINING

What employers think about trade training as an essential prerequisite for success in the positions held by deaf and hard-of-hearing persons is shown in table 48. Of a total of 7,588 workers for whom data are available, 1,244, or 16.4 percent, held positions at the time of the survey for which employers said that school trade training was necessary. Training by apprenticeship was required in about 30 percent of the cases, and in more than half of them no trade training was required at all. These latter, however, include those whose preparation was of a professional or other nature not connected with trades as such. On the whole, however, one is impressed with the fact that only about one-sixth of the deaf and hard-of-hearing were occupying positions for which the required qualifications included previous trade training at school.

TABLE 48.—REQUIREMENTS OF TRADE TRAINING, ACCORDING TO EMPLOYERS

Requirement for trade training	Total		Men		Women	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Total reported	7,588	100.0	5,319	100.0	2,269	100.0
No trade training	4,117	54.3	2,752	51.7	1,365	60.1
Apprenticeship training	2,217	29.2	1,761	33.2	456	20.1
School trade training	1,244	16.4	804	15.1	440	19.4
Miscellaneous training	10	.1	2	.0	8	.4

COMMENTS OF EMPLOYERS

An opportunity was given on the schedules to note comments made by the employer regarding any phase of the problem of employment of deaf and hard-of-hearing persons, with particular reference to their degree of success in his own establishment and to the types of jobs in the plant which in his judgment could be satisfactorily filled by them. Less than 50 percent of the employers interviewed had any comments to make, but those which were reported are suggestive in that they probably represent typical employers' opinions.

Their statements concerning the types of work suited to a person who had profound hearing impairment were in essential agreement with what has already been reported in this survey. They represent in the main specific jobs of semiskilled or unskilled nature that can be carried on without the need of extensive communication. As one employer put it, "any routine position", in which the same operation is performed over and over again, seemed to offer the greatest possibilities of actual employment to the deaf. Another indicated that they work best when given something to do at which they can work alone. Results are not so satisfactory when several men are engaged in the same operation. "The deaf do not fit into group management", another claimed. "They are too frequently sensitive and uncooperative." Still others pointed to the prohibitive amount of time needed in making adequate explanations. Many employers urged that the advantages of hearing aids, of lip reading, and of practice in speech be capitalized to the utmost.

Manufacturing and mechanical trades.—Among the jobs of a mechanical nature which were most frequently mentioned as satisfactory were included those of packer, checker, counter, dipper, labeler, sorter, sealer, sander, rubber, polisher, oiler, wrapper, filler, finisher, and some hundred others of the same general type. Of one employee in a packing company it is said that "he has worked in many departments and gets along well because he can read lips and talk." Of another who was engaged in unloading material, the employer said that he "would like more if they were as good as this one." A worker on leather handbags

compared "more than favorably with normally hearing persons."

Machine operations of various kinds, closely allied with many of these jobs and including also others that are more complicated, were reported as being satisfactory. While the hazards of machinery were emphasized over and over again, yet many other comments gave expression to the conviction, as one employer put it, that "their sense of vibration and of sight are so keenly developed that they recognize hazards and are seldom injured." An official of a construction company reported that the employee in question had been "hired without his deafness being noticed because of his lip-reading ability. He proved exceptionally good around machinery." The deaf are considered by another employer as "good sewing operators." Tailoring and pressing, laundry work, upholstering, shoemaking, are all considered favorably. A manufacturer referred to a deaf worker as "one of the keenest men I ever employed. He has developed an ability in observation and a skill with his hands that more than make up for his loss of hearing." An automobile firm reported: "Though hard-of-hearing and hired as a mechanic, ——— has sold more cars for the company than any salesman on the pay roll." Motor companies, rubber factories, tobacco plants, furniture factories, shoe and garment factories and steel rolling mills, are among the many industries in which opportunities are available.

There was some disagreement as to the value of printing as an occupation for the deaf. Some employers were favorably impressed with the services given by such employees, others minimized its possibilities. One made the comment that "a deaf compositor is better than normal because of his close concentration and freedom from distraction." Another indicated that press feeding was much more suitable than composition. Proofreading was disapproved because of the necessity for hearing what was read.

The work of an inspector was considered by some of particular value, especially where it involves an inspection of material equipment or of finished products without the need of communication. A deaf collar examiner in a shirt factory was considered "as well qualified as any hearing person." An inspector of electrical equipment repaired by

others learned the requirements of the job before his deafness came on, but his employer stated that "the job is not what he would be doing if not handicapped." Of girls employed in decorating glassware it was said that "it is seldom necessary to converse." This type of work was therefore designated as quite suited to the limitations of deaf workers.

General help.—Unskilled labor and general help, such as sweeping, cleaning, gardening, furnace tending, window washing, were mentioned numberless times. An official in a department store said of a bus girl: "If I had more girls like ———, I would be more than pleased. I am sorry she cannot speak, for I should certainly promote her." A janitor in a high school was described as "one of the best in 10 years. He always measures up to responsibility." Other employers, however, deprecate the employment of deaf persons as janitors, claiming that they cannot hear people about them during the day and that they cannot give satisfactory service as watchmen at night.

Personal service.—For the same reason, there was disagreement as to the value of personal service as an occupation for the deaf and seriously hard-of-hearing. Though some housewives are well pleased with their services as helpers in the household, most of them claim that "the work is too varied. They do not hear the telephone or the doorbell and are unable to make the many adjustments that are necessary in general housework." Seamstresses have a more limited range of activities and hence do not face the difficulties of the more general type of household help. So, also, the occupations of laundresses, chambermaids in hotels, bootblacks, and other types of personal service not necessitating meeting the public are considered favorably. Beauty parlor operators are at a disadvantage in the opinion of most employers commenting upon this field of work. Yet one beauty parlor operator "reads the lips of her client in the mirror" and seems to be giving quite satisfactory service.

Agricultural work.—Unfortunately the conditions of the survey made it impossible to make many contacts in the vast agricultural regions of the country in which it is quite probable that numerous deaf and hard-of-hearing workers would be located. Hence the comments of farm or ranch

owners are comparatively few in number. It is interesting to note, however, that farming and dairying are mentioned frequently by those whose comments are available. While the disadvantages are recognized, as in the statement of one farmer who says that his deaf employee "cannot hear the noises of the stock", there are numerous processes in which even this detriment is eliminated. Truck farming, for example, does not involve the care of livestock, and general farm labor in the dairy or the orchard or the field appears to meet with greatest favor in this line of service. Farm mechanics, too, seems to some to offer possibilities.

Clerical and professional service.—There was appreciation of the fact that some kinds of clerical and professional work could be performed by a person with a hearing handicap. Typing, filing, cataloging, indexing, and other types of office work were noted, while designing, drafting, bacteriology, chemistry, and laboratory work of a technical nature were recognized by a few employers as quite feasible. In teaching, the conduct of correspondence courses and instruction of the deaf were emphasized.

A county recorder reported a deaf man as "one of the very best copyists—an expert." A bank official speaks of bank bookkeeping as "an excellent job" for those handicapped in hearing. A deaf billing clerk was described as "a wonderful example of what the deaf can accomplish. He is doing as much as any other clerk in this department." In a department store employing 3,000 workers, 100 are deaf or hard-of-hearing, primarily engaged in comptometry, typing, and bookkeeping. Their employer commends them for their service and calls attention to the fact that they are not distracted by the noises about them. A pay-roll clerk was described as "an excellent lip reader. Some here do not know he has no hearing." An architect who uses an earphone designed the local school and university buildings. A government clerk was rated as "succeeding fairly well" with the comment that "if he had been taught to read lips and to speak even to a small degree, he would have been better off. Promotion in his case seems to be extremely doubtful."

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This consideration of the reactions of employers is brought to a close with the statement of a publisher who became interested in a deaf boy when he learned that the boy could understand what he said and could talk fluently with him. "We would not have considered ——— for our illustrator of books", he said, "if he could not talk to us and explain his conception of how each book or card should be illustrated. His first work for us was simple lettering. We found him very dependable and his work always came in on time. Then we gave him some books to illustrate. At first his work was not particularly original, but he is steadily improving. We write all directions because of the technicalities involved, but we do the same for all illustrators; ——— does not want to trust to lip reading for any specific orders and always requests that we write what he does not understand. As for promotion, he will be capable of and will be given better jobs as his style improves."

CHAPTER 7: IMPLICATIONS OF THE SURVEY

POSSIBILITIES of analysis of data in such a study as this are almost unlimited. There is no value, however, in multiplying tables and figures without discrimination. An effort has been made in this report to select for publication only that tabular material which is significant for the purpose of the study, namely, the guidance of deaf and hard-of-hearing young people toward more nearly adequate vocational adjustment. The data show facts as they are, and the findings are suggestive rather than conclusive, yet implications of the study are in any case important in the consideration of the educational program for the deaf and hard-of-hearing.

At the International Congress on the Education of the Deaf, held at West Trenton, N. J., in 1933, Dr. Elbert A. Gruver spoke as follows: [1]

> In a residential school where all types of deaf children are congregated, with diversified capacities and varying degrees of ability, with limited time and money, with inadequate equipment and insufficient facilities of many kinds, *it is not possible to teach a trade.* I do not, therefore, advocate the establishment of trades departments in elementary residential schools for the deaf. They are too expensive and time-consuming. To provide a shop for every specialized industry and to install machinery for each process of the trade would be, in my opinion, a wasteful expenditure for young deaf children. For pupils capable of advanced manual and industrial art work, trades, etc., there are numerous schools to attend, just as there are abundant high schools and colleges for the specially endowed to pursue academic work. It is possible, however, to give the average deaf child a good working knowledge of an occupation, dexterity in handling tools, discrimination in the choice and use of materials, and skill in operating the machinery preliminary to his entering the trade. This is vocational training as I perceive it. It bears the same relation to industry that elementary education does to culture.

At the Midwest Regional Conference of Executives of Schools for the Deaf, held at Council Bluffs, Iowa, in 1934, Tom L. Anderson,[2] of the Iowa School, asked the pertinent

[1] Gruver, Elbert A. A vocational program for residential schools. West Trenton, N. J., New Jersey School for the Deaf, Proceedings of the International Congress on the Education of the Deaf, 1933, p. 236.

[2] Anderson, Tom L. Vocational needs of today. American Annals of the Deaf, 80: 105-115, March 1935.

question: "Why are so few of our pupils following the trades they are taught in school? We have become quite clever in evading the fact that our pupils are doing about everything under the sun EXCEPT what they did in our trade schools, but we can still point with pride to the fact that most of them are self-respecting industrious citizens."

Mr. Anderson goes on to say further:

> A peculiarity of our system is the emphasis upon the skilled trades for all. Now, in the general run of citizenry, scarcely one man in 10 can meet the occupational demands made upon its workers by a skilled trade. We have, therefore, from the very beginning of their trades education, imposed a serious handicap upon our pupils. Most of our schools lay such emphasis upon this training for the skilled trades that they neglect to provide suitable occupational training for the large majority of pupils who either cannot make the grade demanded of the skilled workman today, or else clearly will not remain in school long enough to complete the necessarily rigorous training. The requirements of industry have been raised to such a degree that only our most favored pupils can reasonably be expected to qualify. These we encourage to set their courses for a higher education and presumably line them up for the superior advantages in life which go with a college education. Still, we have continued to stress the skilled trades for all, requiring expensive buildings, costly machinery and materials, and teachers who are such independent specialists that nobody around the place can substitute for them when they are occasionally absent. . . .
>
> We can brag all we please about the motor abilities of the deaf, but we must conclude that the skilled trades today are demanding more and more general intelligence in addition to motor ability. Also that other factors more or less beyond our control have come to operate against the success of our efforts.
>
> As to our general policy, I honestly believe that our whole vocational training policy here in the Middle West should be revised sharply downward, for all pupils below college grade. Just as we agree that a more practical academic course is needed for the average pupil, when only 1 percent are headed for college, we should likewise provide a more abundant occupational opportunity for the large percentage of pupils who will never fit into the picture as skilled tradesmen. . . .
>
> In this paper I have recommended that we train more of the average deaf for the humbler tasks of life. I realize that I lay myself open to the criticism of the organized deaf, for apparently wishing to degrade the deaf. A little reflection will allay any such criticism. We merely seek to elevate the tasks the deaf are doing anyhow, and to broaden their field of usefulness in honorable employment.

These statements, coming from the lips of two outstanding leaders in the education of the deaf, could scarcely have expressed more clearly the implications of the findings of the survey so far as it concerns the profoundly deaf if they had grown directly out of the accumulation of data presented. Both statements were made before the analysis of material had been completed. The one comes out of experience with the deaf in the agricultural fields of the Middle West; the other comes out of the industrial regions of the East. Both voice a conviction concerning the vocational education of the deaf which is corroborated to a significant degree by the statistical analysis presented in this report. There is no need to amplify it here. The primary purpose of the report is to give the factual data upon the basis of which those directly concerned with the education of the deaf can further build their convictions and formulate their practices. One of the accepted objectives of education is to help the pupil to do better the desirable things that he will do anyway. If, as Mr. Anderson suggests, this principle is applied to the vocational education of deaf pupils, we will have taken a definite step toward a vocational adjustment that is satisfying both to them and to their friends.

This is not to be interpreted as ruling out the possibilities of advanced training for those who are able to take it. Individual differences among deaf pupils are just as significant as among the hearing. Their abilities and aptitudes need to be studied scientifically in order that the guidance given to each one may lead to the best possible selection of vocational activities. There can be no proper guidance without knowledge of physical fitness, mental capacity, mechanical skill, and personal characteristics. Cumulative data on these items for each pupil are no less necessary in a school for the deaf than in a school for the hearing. On the basis of such information can be built a program of guidance that is directed toward the realization of the greatest potentialities of every student.

With the hard-of-hearing the situation varies in certain details as the degree of hearing loss varies. Avenues of occupational activity widen and multiply as hearing acuity approaches normal, especially for those who frankly recognize their handicap and use all possible means to overcome

it. Why should mechanical hearing aids not be employed as openly as are mechanical seeing aids? The use of lenses to augment visual acuity is universally accepted. Why not the use of instruments to augment hearing acuity in those cases in which it is effective? The one should certainly cause no more embarrassment than the other. If, moreover, the use of such an aid is supplemented by a determined effort to learn the technique of lipreading and to preserve the purity of speech, the hard-of-hearing person is bound to have a significant advantage over his profoundly deaf brother in the scope of his vocational outlets. He, too, however, needs the individual guidance that every young person should have in determining abilities, interests, and aptitudes, preliminary to making a final occupational choice.

Would that every school for the deaf or for the hard-of-hearing—day school and residential school—might install a well-organized personnel or guidance program, which would include among its objectives the analysis, on the one hand, of individual needs and abilities, and, on the other hand, of local opportunities for occupational service. Both need to be considered in the development of a suitable program of vocational training. Among the great tasks facing us in the education of exceptional children is that of finding the occupations in which they can serve happily and in which a handicap may be transformed into an asset. It is hoped that in the years immediately ahead, working conferences may be actively engaged in making further studies of this problem for the deaf and the hard-of-hearing.

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