UNITED STATES DEPARTMENT OF LABOR
W. N. DOAK, Secretary
CHILDREN'S BUREAU
GRACE ABBOTT, Chief

EMPLOYMENT OF MENTALLY DEFICIENT BOYS AND GIRLS

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LETTER OF TRANSMITTAL

U. S. DEPARTMENT OF LABOR,
CHILDREN'S BUREAU,
Washington, May 20, 1932.

SIR: There is transmitted herewith a report on the work histories of mentally handicapped minors dealing with their industrial adjustment. Part 1 of the report relates to pupils formerly enrolled in the special classes of the public schools in Detroit, Rochester (N. Y.), Newark, Cincinnati, Los Angeles, San Francisco, and Oakland; Part 2, to young persons formerly attending two Illinois State institutions for the feeble-minded.

The study was made under the direction of Ellen Nathalie Matthews and the report was written by Alice Channing, who were at the time director and associate director of the industrial division of the Children's Bureau. The work in Newark was developed under the general supervision of Dr. Mary H. S. Hayes, director, vocational service for juniors, New York City, who also advised on the psychological aspects of the study and read the report. Dr. Meta L. Anderson, director of the department of Binet classes, board of education, Newark, has read the report with especial reference to these aspects.

Acknowledgment is made of the cooperation given the bureau on the conduct of the inquiry by the public-school officials in charge of the special classes for mentally subnormal children in the cities visited and by the officers of the Illinois State institutions for the feeble-minded, in making their records available for the study. The bureau is also indebted for their helpful cooperation to employers of minors included in the study and to employment certificate issuing officers, juvenile courts, and the social agencies in the communities visited.

Respectfully submitted.

GRACE ABBOTT, *Chief.*

Hon. W. N. DOAK,
Secretary of Labor.

EMPLOYMENT OF MENTALLY DEFICIENT BOYS AND GIRLS

INTRODUCTION

In recent years attention has been drawn increasingly to the large number of persons in the general population whose mentality is so low as to handicap them in their industrial as well as in their social adjustments. To give training to children who are mentally incapable of progressing in ordinary school subjects, the public schools have developed special classes for their instruction. The first public-school classes in this country specifically for the training of mentally deficient children were established between 1895 and 1900.[1] Since that time special classes have been established rapidly. The number of children enrolled in classes for subnormal and backward children in city schools for which reports were received by the United States Office of Education increased from 10,890 in 1914, the first year in which such figures were available, to 23,252 in 1927.[2] Similarly the number of persons cared for in institutions for mental defectives has increased from 14,347 in 1904 to 42,954 in 1923.[3]

A number of studies have been made to find out what becomes of mentally deficient young persons after they leave the special classes and also of persons who have been discharged or paroled from institutions for the feeble-minded. (See Appendix, p. 106.) Most of the studies dealing with the institutional group have laid especial emphasis on the social adjustment of the young persons, on whether they remain in the community, marry, and have children, or whether they drift into institutions for defectives and delinquents; some of the studies also take up the question of their occupations and earning capacity. The studies concerning the afterhistories of boys and girls who have passed through special classes generally contain information about the kinds of work in which they are employed, their earnings, and whether or not they are capable of self-support, as well as some reference to their social adjustment.

The present study was undertaken primarily to obtain information on their industrial adjustment. In 1923 and 1924 the Children's Bureau, in a series of studies in seven cities, obtained information on the employment histories of 949 boys and girls who had attended special classes for children of subnormal mentality in the public schools and who had been out of school for three years or more. In 1925 another study was made of the after-institution histories of 167 boys and girls who had been cared for in two Illinois State institutions for the feeble-minded and who had been out of the institutions for at least one year. In both surveys information was

[1] Wallin, J. E. Wallace: The Education of Handicapped Children, p. 67. Cambridge, 1924.
[2] Schools and Classes for Feeble-minded and Subnormal Children, p. 3. U. S. Bureau of Education Bulletin, 1928, No. 5. Washington, 1928.
[3] Feeble-minded and Epileptics in Institutions, 1923, p. 26. U. S. Bureau of the Census. Washington, 1926.

sought regarding the work histories of these individuals of subnormal intelligence and the success they attained in industry. Detailed data were obtained regarding the duration of their various employments and the extent to which they had been unemployed since they had started work, the number of positions they had held, the kind of occupations in which they were employed, and their earnings in their first and last positions. An effort was also made to get the opinions of employers in regard to the success with which they met the requirements of their jobs.

Part 1 of this report gives the information obtained on the employment of the special-class pupils and Part 2 gives the information obtained for the boys and girls who had been in institutions.

PART 1.—EMPLOYMENT OF FORMER PUPILS OF SPECIAL CLASSES

SCOPE AND METHOD OF STUDY

The cities selected for inclusion in the study of the work histories of former special-class pupils were Newark, Rochester (N. Y.), Detroit, Cincinnati, Los Angeles, San Francisco, and Oakland, in all of which special classes had been in operation for some time and were well organized. At the time of the inquiry children were assigned to special classes in these cities only after those who had been referred by their teachers or school counselors had been given psychological tests. As a rule, only children whose intelligence quotients were below 75 or who were at least three years retarded were admitted, the standards for admission varying slightly in the different cities. The proportion of the total elementary-school population in the special classes varied somewhat from city to city, Detroit having a larger proportion than the other cities.[1]

The study was based on the boys and girls who had left the special classes during a 3-year period, in Newark covering the school years from September, 1916, to June, 1919, and in the other cities covering the school years from September, 1917, to June, 1920. An interval of from three to seven years had elapsed between the date they had left school and the date they were interviewed, a period sufficiently long to make a satisfactory study of their work experiences. Young persons who were not typical of those for whom special classes were organized, that is, those who had been returned to the regular school grades, transferred to parochial schools or to institutions for defectives or delinquents, or exempted from school attendance because they were mentally or physically unfit, were excluded from the group selected for investigation. Others were excluded because their school records were incomplete or because there was no record of a mental test or because they had moved out of the city. In Detroit, where many more boys and girls had left special classes during the 3-year period than in the other cities, those who lived at some distance from the center of the city were also excluded.

Of the 1,172 boys and girls whose employment histories were investigated, 1,067 were located. Nine hundred and ninety-eight (94 per cent) of those who were located had been employed at some time after leaving school. Sixty-nine—12 boys and 57 girls—had never been employed. (Table 1.)

[1] Biennial Survey of Education 1920–1922, pp. 123–125 and pp. 725–728. U. S. Bureau of Education Bulletin, 1924, No. 14. Washington, 1925.

TABLE 1.—*Number of young persons selected for investigation, number included and excluded from special study, and reasons for exclusion from study of young persons formerly attending special classes in seven specified cities*

City	Young persons selected for investigation					
	Total	Included in study	Excluded from study			
			Total	Reason for exclusion		
				Employed but work history not obtained	Never employed	Not located
All cities	1,172	949	223	49	69	105
Detroit	474	391	83	14	25	44
Rochester	242	210	32	9	10	13
Newark	222	181	41	14	9	18
Cincinnati	97	81	16	3	3	10
California cities	137	86	51	9	22	20
Oakland	54	38	16	6	3	7
San Francisco	43	29	14	2	7	5
Los Angeles	40	19	21	1	12	8

A somewhat larger proportion of the 69 young persons who had never worked than of those who found employment were of inferior mentality; 24 (35 per cent) of the 69 had intelligence quotients of less than 50 as compared with 71 (7 per cent) of the employed group. (See p. 8.) The boys who had not been employed appeared to have been kept at home because of their low mentality or because they were physically unable to work. Thirty of the girls also had been kept at home for these reasons; the remainder (including 19 girls who had married) were said to be needed at home.

Fairly complete information was obtained for the 949 former special-class pupils who had obtained employment, and these comprise the group included in the present study.

The data for the study were obtained from records and from interviews. Records from schools and psychological clinics contained the young persons' intelligence ratings and certain facts of their schooling and social history. An attempt was made to get information about their personal traits, but the material available proved too incomplete to use. Records of employment-certificate and juvenile-employment offices were consulted as to the jobs they had held. Court and police records were searched for information concerning delinquency. The home of each individual was visited for information from him or from his parents regarding the nature and wages of each job, the duration of the job, and the reason for leaving it. Considerable difficulty was experienced in tracing these individuals and their families, as the last known address obtained from the schools was from three to seven years old. Some of the individuals who had moved out of town were visited, and in some cases information for these was obtained through correspondence. All former employers who could be located were interviewed, and in some cases present employers, but in other cases it was not considered advisable to visit the latter, as jobs might have been jeopardized if it were known that inquiries were being made. Sixty-five per cent of all the employers

were visited. Some of them did not keep records and remembered only that the individual had been employed and that no unfavorable reports had been made concerning him. Others remembered their employees well and could give valuable information about them.

The results of the Binet-Simon tests given the children while in school were used to establish an index of the mentality of the individuals included in the study. The Stanford revision of the Binet-Simon test results were used where they were available, but in Newark, San Francisco, and Los Angeles most of the young persons had been tested by the Goddard revision,[2] and this test was accepted for the study in these cities. The results obtained even from the same type of tests given one individual at different times vary somewhat, depending on a variety of causes, such as the conditions under which the tests are given, the emotional reactions of the individual, and, if he is foreign born, his knowledge of English, but it is generally believed that they afford the best measure of general intelligence available.[3] The revisions of the Binet-Simon scale are, of course, somewhat different, so that the intelligence quotients obtained by one revision are not exactly comparable to those obtained by the other. However, as they were distributed in relatively large groups, the measure was considered sufficiently accurate for purposes of comparison. For 586 (62 per cent) of the individuals included in the study the tests from which the intelligence quotients were computed are the Stanford revision of the Binet test, and for 337 (36 per cent), the Goddard revision. (Table 2.) The earlier Terman revision of the Binet test given to 6 (less than 1 per cent) of the young persons was also used. Another 2 per cent (20 Cincinnati boys and girls) had been tested by the Yerkes point scale; these mental ratings were not used.

TABLE 2.—*Type of mental test given young persons formerly attending special classes in seven specified cities*

Type of mental test	Young persons formerly attending special classes					
	All cities	Detroit	Rochester	Newark	Cincinnati	California cities [1]
Total	949	391	210	181	81	86
Stanford revision—Binet	586	352	136	----	61	37
Goddard revision—Binet	337	39	74	181	----	43
Yerkes point	20	----	----	----	20	----
Terman revision	6	----	----	----	----	6

[1] Includes Los Angeles, Oakland, and San Francisco.

INSTRUCTION GIVEN IN SPECIAL CLASSES

At the time the boys and girls included in the study attended school the instruction given in the special classes in academic work and in physical and manual or industrial training varied in the different cities. Reading, spelling, arithmetic, and English were the principal academic subjects taught, such work depending upon the mental capacity of the children. Handwork included such subjects as beadwork, clay modeling, basketry, sewing, cooking, weaving, brush

[2] Between 1916 and 1920, when the children included in the study were leaving school, the Stanford revision of the Binet-Simon test was just coming into use in these cities.

[3] For the constancy of the intelligence quotient as determined by the Stanford revision of the Binet-Simon test, see The Intelligence of School Children, by Lewis M. Terman, ch. 9 (New York, 1919).

making, and woodworking. Detroit had two kinds of classes—one for children under 13½ years, the other, known as prevocational classes, for older children. In the latter the boys were trained in the more advanced forms of woodwork and in printing, cobbling, and automobile repairing, and the girls in sewing, millinery, and cooking.[4] In Rochester some of the older special-class boys who had shown ability in handwork attended a prevocational school in which they had training in printing, cobbling, and cabinet work. Some of the boys were assigned work in connection with filling orders for school furniture or printing school-report forms. This school also admitted children who were retarded but had not been assigned to special classes. Newark had a so-called "trade class" in which boys were trained in the more advanced kinds of woodwork and in cobbling, and the girls in domestic science. All the other cities included in the study also had classes in which the older children were taught a greater variety of handwork than the younger children.[5] Trade training that prepared directly for wage earning was not attempted in the special classes at the time the young persons included in the study were attending school; the effort was to keep the children occupied in tasks that would train them in habits of industry and would improve their habits of personal hygiene and conduct.

THE GROUP STUDIED

SEX

In this study of former special-class pupils the boys outnumbered the girls almost two to one. (Table 3.) As a rule more boys than girls were enrolled in special classes.[6] The boys included in the study greatly outnumbered the girls in Detroit, Newark, Cincinnati, and San Francisco, but the number of each was about the same in Rochester, Oakland, and Los Angeles. In some cities troublesome boys of border-line mentality were assigned to special classes rather than girls of the same mentality who did not constitute disciplinary problems.

TABLE 3.—*Number of boys and girls included in study formerly attending special classes in specified cities*

City	Young persons formerly attending special classes		
	Total	Boys	Girls
All cities	949	603	346
Detroit	391	255	136
Rochester	210	109	101
Newark	181	128	53
Cincinnati	81	59	22
California cities	86	52	34
Oakland	38	20	18
San Francisco	29	23	6
Los Angeles	19	9	10

[4] A cafeteria center for training girls was established in Detroit in 1922, after the children included in the study had left school.

[5] For information on the curriculum of special classes, see The Education of Handicapped Children, by J. E. Wallace Wallin (Cambridge, 1924).

[6] Schools and Classes for Feeble-minded and Subnormal Children, p. 10. U. S. Bureau of Education Bulletin, 1923, No. 59. Washington, 1924. In 1921–22 there were 14,480 boys and 7,587 girls in the special classes of the cities reporting to the bureau.

RACE AND NATIONALITY

Three-fourths of the young persons were native-born white, 18 per cent were foreign-born white, and 6 per cent were colored. Three-fifths, however, had foreign-born fathers, Italians, Germans, Austrians, and Poles predominating.

ECONOMIC CONDITION OF FAMILIES

Although no special information concerning the economic condition of the families was obtained, the occupation of the father or guardian and the employment of the mother at the time the boy or girl was in the special class may serve as an indication of their economic status. The occupations of the fathers or guardians of 795 boys and girls were ascertained; the remainder either had no father or guardian or information as to their occupation was not obtained. More than three-fifths had fathers or guardians engaged in manufacturing and mechanical industries, and about one-fourth had fathers in occupations classified under trade or transportation. Thirty-four per cent of these fathers of former special-class pupils in Detroit and 31 per cent in both Rochester and Newark were employed as laborers or semi-skilled operatives in manufacturing and mechanical industries, compared with 28 per cent of all male wage earners of 25 years of age and over in Detroit, 25 per cent in Rochester, and 26 per cent in Newark; in other cities studied the number of fathers so employed was not large enough for comparable purposes. About 1 per cent of the fathers were in clerical occupations and less than 1 per cent in professional occupations; among male wage earners 25 years of age and over as a whole the proportion of clerical workers was about 6 per cent in each of the cities and of professional workers from 4 to 5 per cent.[7]

One-fourth of the young persons had mothers who were gainfully employed at the time they were attending the special classes, the proportion ranging from 18 per cent in Detroit to 39 per cent in Rochester. The proportions of mothers of special-class pupils who were employed in the different cities were much greater than the proportion of married women in these cities reported as employed in 1920. According to census figures, 9 per cent of the married women 15 years of age and over were gainfully employed, a proportion ranging from 7 per cent in Newark to 14 per cent in Los Angeles.[8]

INTELLIGENCE LEVELS

Seventy-seven per cent of the individuals for whom mental ratings based on revisions of the Binet-Simon tests were available had intelligence quotients of less than 70, the usually accepted border line of feeble-mindedness,[9] and 69 per cent had intelligence quotients between 50 and 70, falling into the so-called "moron" group.[10] (Table 4.) Only 12 had intelligence quotients of less than 40, and the highest was 88, a higher level of intelligence than that of children generally accepted in special classes. Somewhat larger proportions of the individuals were in the upper intelligence groups in Rochester and the California cities than in the other cities. In Cincinnati only 6 of 61

[7] Fourteenth Census of the United States, 1920, vol. 4, Population, Occupations, pp. 1101, 1181, 1213. Washington, 1923.
[8] Ibid., pp. 694, 800.
[9] Terman, Lewis M.: The Measurement of Intelligence, p. 79. Cambridge, 1916.
[10] In computing intelligence quotients for persons over 16 years of age, 16 years was used as the adult age level.

children who had been given Binet tests, relatively fewer than in any other city, had intelligence quotients as high as 70. Variations in the different cities may be explained partly by the differences in standards for excluding children who are mentally unfit from regular school and partly by the differences in the extent of local provision for the mentally subnormal, either in the special classes themselves or in institutions.

TABLE 4.—*Intelligence quotient of boys and girls formerly attending special classes in seven specified cities*

Intelligence quotient and sex	Young persons formerly attending special classes						
	All cities		Detroit	Rochester	Newark	Cincinnati	California cities [1]
	Number	Per cent distribution					
Total	949		391	210	181	81	86
Intelligence quotient reported	929	100	391	210	181	61	86
Less than 40	12	1	2	1	6	1	2
40, less than 50	59	6	27	11	7	7	7
50, less than 60	266	29	117	56	52	17	24
60, less than 70	379	41	163	81	75	30	30
70, less than 80	186	20	71	54	38	5	18
80 and more	27	3	11	7	3	1	5
Intelligence quotient not reported	20					[1] 20	
Boys	603		255	109	128	59	52
Intelligence quotient reported	588	100	255	109	128	44	52
Less than 40	5	1			3	1	1
40, less than 50	26	4	12	4	3	4	3
50, less than 60	157	27	69	24	37	10	17
60, less than 70	246	42	113	39	51	23	20
70, less than 80	133	23	53	36	31	5	8
80 and more	21	4	8	6	3	1	3
Intelligence quotient not reported	15					[1] 15	
Girls	346		136	101	53	22	34
Intelligence quotient reported	341	100	136	101	53	17	34
Less than 40	7	2	2	1	3		1
40, less than 50	33	10	15	7	4	3	4
50, less than 60	109	32	48	32	15	7	7
60, less than 70	133	39	50	42	24	7	10
70, less than 80	53	16	18	18	7		10
80 and more	6	2	3	1			2
Intelligence quotient not reported	5					[1] 5	

[1] These young persons received the Yerkes point test; no intelligence quotients were computed unless based on revisions of the Binet-Simon tests.

The boys in the special classes were of somewhat higher grade mentality than the girls, 26 per cent of the boys, compared with 17 per cent of the girls, having intelligence quotients of 70 or more, and only 5 per cent of the boys, compared with 12 per cent of the girls, having intelligence quotients of less than 50. The same explanation may be given for this as for the preponderance of boys in special classes—the fact that boys of somewhat inferior intelligence, though not of especially low grade, were more apt to be troublesome than girls of the same intelligence levels and were accordingly assigned to special classes, for which there was usually a waiting list, in place of girls

who may have been mentally inferior but who were not such a source of annoyance to the regular-grade teachers.

PHYSICAL DEFECTS

According to the information entered on the special-class records 85 per cent of the boys and girls had no obvious physical disability at the time they attended the special classes. The remainder had defects of some kind, such as those of vision, hearing, or speech; 9 had epilepsy; 14 were crippled in some way; and a few were reported to be highly nervous.

SCHOOL PROGRESS

Almost three-fourths of the boys and girls for whom the number of years in regular school was reported (72 per cent of each sex) had spent five years or more in regular school before entering the special classes.[11] They had entered the special classes from every grade in regular school from the first up to and through the seventh. The girls on the whole had made higher attainment in regular school than the boys, 57 per cent of them having attended the fourth or a higher grade as compared with 46 per cent of the boys. (Table 6.) Frequently the children had repeated grades several times before they were transferred.

The median grade attained in the regular school before transfer to a special class was the second for those with intelligence quotients of less than 50 (as determined by tests given while the children were attending the special classes), the third for those with intelligence quotients between 50 and 60, and the fourth for all those with intelligence quotients of 60 or higher. Fifty-one children whose intelligence quotients were less than 70 and who were in the sixth or seventh grade had obviously been promoted to grades too advanced for children of such limited mental ability.

The majority of the young persons (71 per cent of the boys and 78 per cent of the girls reporting) entered the special classes when they were 12 years of age or older. A large proportion (37 per cent of the boys and 48 per cent of the girls) entered after they were 14 years of age. The boys were transferred earlier than the girls not because of greater dullness, for they usually had higher mental ratings than the girls, but probably because they had become troublesome at earlier ages than the girls and accordingly were assigned to special classes. The age of entering the special classes differed somewhat from city to city, Newark and Rochester children, for example, entering special classes at younger ages than those in Detroit. These differences are undoubtedly due to differences in the policies in the special-class departments of the cities in regard to assigning children to those classes and in the facilities for accommodating those of different ages.

The young persons studied had spent from 14 days to 9 years in the special classes, but more than half had spent less than two years. (Table 5.) Boys on the whole had attended the special classes longer than the girls. In Detroit, Cincinnati, and the California cities combined 65 per cent of those studied had attended less than two years, but in Newark 55 per cent and in Rochester 76 per cent had attended two years or longer.

[11] The term "regular school" as used in this study means "regular grades" for most cases, but in a few instances it included also ungraded classes, sometimes called "opportunity classes," where the children were tried out for awhile, and then, failing to make progress, were assigned to the special classes for the feeble-minded.

TABLE 5.—*Duration of attendance in special classes of boys and girls formerly attending special classes in seven specified cities*

Duration of attendance in special classes and sex	Young persons formerly attending special classes						
	All cities		Detroit	Rochester	Newark	Cincinnati	California cities
	Number	Per cent distribution					
Total	949		391	210	181	81	86
Duration reported	938	100	389	210	175	80	84
Less than 6 months	112	12	64	9	11	8	20
6 months, less than 1 year	128	14	72	11	11	17	17
1 year, less than 2	248	26	113	30	57	28	20
2 years, less than 3	155	17	54	42	39	12	8
3 years, less than 4	97	10	31	33	22	4	7
4 years, less than 5	74	8	25	28	12	4	5
5 years and more	124	13	30	57	23	7	7
Duration not reported	11		2		6	1	2
Boys	603		255	109	128	59	52
Duration reported	593	100	253	109	122	58	51
Less than 6 months	62	10	34	5	6	8	9
6 months, less than 1 year	78	13	47	2	4	12	13
1 year, less than 2	156	26	74	10	44	17	11
2 years, less than 3	94	16	37	15	26	10	6
3 years, less than 4	67	11	23	21	16	3	4
4 years, less than 5	53	9	16	19	10	3	5
5 years and more	83	14	22	37	16	5	3
Duration not reported	10		2		6	1	1
Girls	346		136	101	53	22	34
Duration reported	345	100	136	101	53	22	33
Less than 6 months	50	14	30	4	5		11
6 months, less than 1 year	50	14	25	9	7	5	4
1 year, less than 2	92	27	39	20	13	11	9
2 years, less than 3	61	18	17	27	13	2	2
3 years, less than 4	30	9	8	12	6	1	3
4 years, less than 5	21	6	9	9	2	1	
5 years and more	41	12	8	20	7	2	4
Duration not reported	1						1

That the young persons on the whole were unable to make further progress in academic subjects by the time they were transferred to special classes is shown by the reports for the grades they attained in academic work while in the special classes. The academic grade equivalent was determined by the teachers' reports of the last year's work in the special classes. Sixty per cent of the boys and 68 per cent of the girls had reached an academic grade in the special classes no higher than that which they had attained in regular school; the remaining boys and girls had made some progress. The proportion (25 per cent) who were doing the equivalent of fifth-grade work or more in the special classes was the same as the proportion who had reached this grade in regular schools. (Table 6.) The median grade reached in academic subjects in the special classes was the fourth. The proportion who had reached the equivalent of the fourth grade varied somewhat in the different cities, owing no doubt both to differences in grading in the special classes and to differences in the mental ability of the young persons in the various cities. The proportion who were doing academic work equivalent to the fourth grade

was 74 per cent of the young persons in Detroit, 56 per cent in Rochester, 54 per cent in the California cities, and only 15 per cent in Newark.

In cities in which the grades reached in handwork were given—Detroit, Rochester, Newark, and Los Angeles—the reports for the boys' and girls' last year in the special classes were recorded. The median grade reached in the industrial courses of the special classes by the 270 boys for whom such reports were obtained was the sixth; the grade reached by the 164 girls was the fifth. These figures suggest that boys and girls of inferior intelligence can attain a certain degree of proficiency in handwork that is not possible along academic lines, although grades reached in academic subjects and in handwork are not comparable.

TABLE 6.—*Academic grade equivalent attained in special classes and last grade attended in regular school by boys and girls formerly attending special classes in seven cities*

Academic grade equivalent attained in special classes and sex	Young persons formerly attending special classes							
	Total	Last grade attended in regular school						
		First or lower	Second	Third	Fourth	Fifth	Sixth or higher	Not reported
Total	949	115	133	213	228	167	68	25
Grade equivalent reported	829	102	110	184	207	150	56	20
First or lower	58	24	18	12	2	----	----	2
Second	115	24	27	30	23	5	----	6
Third	195	23	29	63	54	17	2	7
Fourth	255	24	26	59	81	48	12	5
Fifth	138	6	10	14	43	51	14	----
Sixth or higher	68	1	----	6	4	29	28	----
Grade equivalent not reported	120	13	23	29	21	17	12	5
Boys	603	74	96	143	136	97	37	20
Grade equivalent reported	522	64	79	124	124	88	26	17
First or lower	36	12	15	8	----	----	----	1
Second	74	14	20	18	14	2	----	6
Third	128	14	20	40	34	13	1	6
Fourth	161	18	15	43	48	29	4	4
Fifth	83	5	9	10	24	25	10	----
Sixth or higher	40	1	----	5	4	19	11	----
Grade equivalent not reported	81	10	17	19	12	9	11	3
Girls	346	41	37	70	92	70	31	5
Grade equivalent reported	307	38	31	60	83	62	30	3
First or lower	22	12	3	4	2	----	----	1
Second	41	10	7	12	9	3	----	----
Third	67	9	9	23	20	4	1	1
Fourth	94	6	11	16	33	19	8	1
Fifth	55	1	1	4	19	26	4	----
Sixth or higher	28	----	----	1	----	10	17	----
Grade equivalent not reported	39	3	6	10	9	8	1	2

The quality of the work done in the industrial classes, irrespective of the grade of work, was recorded on the reports of 428 boys and 288 girls. Forty-seven per cent of the boys and 59 per cent of the girls were said to have done good work; the remainder, fair or poor work. For the young persons for whom the quality of work was reported,

almost as large a proportion with intelligence quotients of less than 70 as of those with intelligence quotients of 70 and more had done work that was rated good. No doubt the standards for marking differed among the teachers and in the different cities.

DELINQUENCY RECORDS

In the absence of other concrete information concerning the character traits of the individuals included in the study, court records may serve as one indication of unfavorable personal characteristics. Individuals who had been placed on probation or sent to institutions for delinquents, but not those whose cases had been dismissed or who had been fined, were classified as delinquent. As is true of boys and girls in general,[12] relatively more of the boys of subnormal mentality than of the girls (20 per cent of the boys and 6 per cent of the girls) had been in court and had been either placed on probation or committed to correctional institutions at some time in their history before the date of the study. (Table 7.) More than two-fifths of the boys who had been delinquent and a few girls had been brought to court only before leaving school; the others had been in court after leaving the special classes. In spite of the fact that the courts in different cities have different policies in regard to dismissing cases and placing children on probation, the proportions of delinquent boys in the three cities in which the numbers were large enough to give reliable percentages were very similar—19 per cent in Detroit, 20 per cent in Rochester, and 22 per cent in Newark.

TABLE 7.—*Delinquency record and intelligence quotient of boys and girls formerly attending special classes in seven cities*

Delinquency record and sex	Young persons formerly attending special classes									
	Total		Intelligence quotient							
			Less than 50 (number) [a]	50, less than 60		60, less than 70		70 and more		Not reported
	Number	Per cent distribution		Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	
Boys	603	-------	31	157	-------	246	-------	154	-------	15
Delinquency record reported	598	100	31	155	100	243	100	154	100	15
Delinquency record	117	20	1	24	15	54	22	36	23	2
No delinquency record	481	80	30	131	85	189	78	118	77	13
Delinquency record not reported	5	-------	-------	2	-------	3	-------	-------	-------	-------
Girls	346	-------	40	109	-------	133	-------	59	-------	5
Delinquency record reported	344	100	40	108	100	132	100	59	100	5
Delinquency record	20	6	-------	8	7	11	8	1	2	-------
No delinquency record	324	94	40	100	93	121	92	58	98	5
Delinquency record not reported	2	-------	-------	1	-------	1	-------	-------	-------	-------

[a] Per cent distribution not shown because number of boys and number of girls was less than 50.

[12] Seventeenth Annual Report of the Chief of the Children's Bureau, 1929, p. 24. Washington, 1929.

Because of the reported tendency to assign troublesome boys to special classes in preference to boys or girls of the same mental capacity who did not constitute disciplinary problems, it would be expected that boys of the upper-intelligence groups in special classes would be more likely to be delinquent than those of inferior intelligence. Only 13 per cent of the boys whose intelligence quotients were less than 60, compared with 23 per cent of those whose intelligence quotients were 60 or more, had been delinquent at some time in their lives. Only one boy whose intelligence quotient was less than 50 had a court record for delinquency. The number of girls who were delinquent was so small that differences in the proportions delinquent in the various intelligence groups were not conclusive.

Special-class pupils as a whole, however, constitute a group of young persons whose behavior is much less troublesome than that of individuals who have been sent to institutions. Mentally deficient children who have been delinquent and prove unmanageable at home are generally those who are committed to institutions for the feeble-minded; others of the same grade of mental defect who are not brought to the attention of the courts remain with their families. According to a report on cases discharged from the institution at Letchworth Village, N. Y., the border-line cases of mental defectives who are committed to institutions are a selected group of the feeble-minded, the majority of whom have previously been misfits in the world at large.[13] Compared with 15 per cent of the special-class pupils who had been on probation or in institutions for delinquents, 76 per cent of the individuals included in the study of former inmates of two Illinois State institutions (see Part 2, p. 73) had been brought to court on delinquency charges at some time in their lives before the study was made and either placed on probation or committed to institutions for defectives or delinquents.

ENTRANCE UPON WORKING LIFE

AGE ON LEAVING SCHOOL

The compulsory school attendance laws of all the States in which the young persons lived at the time they attended special classes required school attendance up to the age of at least 16 years, and did not permit a child under 16 to leave school for work unless certain educational requirements were fulfilled, ranging from completion of the fifth grade for children of 14 in New Jersey [14] to completion of the eighth grade for children of 14 in New York and California and the seventh for children of 15 in California. In Cincinnati mentally defective boys of 15 years of age were allowed to leave school for work if they were deemed mentally incapable of completing the sixth grade by the time they were 16; all girls were required by law to remain in school until they were 16. In Newark mentally defective children were, in practice, allowed to leave school for work at either 14 or 15 years of age, even if they had not completed the fifth grade.

Sixty-two per cent of the young persons included in the study, relatively more boys than girls, left school before they were 16 years

[13] Storrs, Harry C., M. D.: A Report on an Investigation Made of Cases Discharged from Letchworth Village, p. 221. Fifty-third Annual Session, 1929, American Association for the Study of the Feeble-minded.

[14] Raised to completion of the eighth grade for children of 14, sixth grade for children of 15, since the date of the study.

of age, but only 15 per cent before they were 15 years of age. (Table 8.) Relatively more young persons who lived in Newark, Cincinnati, and the California cities left school before they were 15 than in the other cities. The proportion of boys leaving school before they were 16 in the cities covered by the study varied from 56 per cent in Detroit to 88 per cent in Cincinnati. This relatively high proportion in Cincinnati was due no doubt to the exemption of mentally retarded boys from the educational requirement of the law. Forty-eight per cent of the Detroit girls, 55 per cent of the Rochester girls, and 64 per cent of the Newark girls left school before they were 16. About two-thirds of the girls in Cincinnati and about the same proportion of the girls in the California cities also left school before they were 16. With one exception none of the young persons who left the special classes before the age of 16 had completed a grade equivalent to the grade requirements of their respective States.

TABLE 8.—*Age on leaving special classes of boys and girls formerly attending special classes in seven specified cities*

Age on leaving special classes and sex	Young persons formerly attending special classes						
	All cities		Detroit	Rochester	Newark	Cincinnati	California cities
	Number	Per cent distribution					
Total	949	100	391	210	181	81	86
12 years	1	(1)	----	1	----	----	----
13 years	20	2	2	2	8	3	5
14 years	118	12	18	11	54	13	22
15 years	446	47	187	102	74	51	32
16 years	346	36	174	93	43	14	22
17 years and over	18	2	10	1	2	----	5
Boys	603	100	255	109	128	59	52
13 years	14	2	----	2	5	3	4
14 years	86	14	11	5	42	12	16
15 years	294	49	131	53	55	37	18
16 years	195	32	105	48	25	7	10
17 years and over	14	2	8	1	1	----	4
Girls	346	100	136	101	53	22	34
12 years	1	(1)	----	1	----	----	----
13 years	6	2	2	----	3	----	1
14 years	32	9	7	6	12	1	6
15 years	152	44	56	49	19	14	14
16 years	151	44	69	45	18	7	12
17 years and over	4	1	2	----	1	----	1

[1] Less than 1 per cent.

AGE ON STARTING WORK

About one-half of the boys and nearly two-fifths of the girls for whom age on going to work was reported went to work before 16. The proportion for both sexes ranged from 36 per cent in Detroit to 70 per cent in Cincinnati. A considerable number of the young persons in Newark, Cincinnati, and the California cities, but few in either Detroit or Rochester, went to work when they were 14 years of age. (Table 9.)

Most of the young persons apparently experienced little difficulty in getting employment as soon as they left school. Seventy per cent of the boys and 56 per cent of the girls went to work within a few

weeks or a month after leaving school. A considerable proportion, however, especially among the girls (16 per cent of the boys and 29 per cent of the girls), were still unemployed after they had been out of school three months or more. Probably many of these girls did not try to find employment immediately outside their homes. At the end of a year's time most of these young persons had gone to work.

TABLE 9.—*Age on going to work of boys and girls formerly attending special classes in seven specified cities*

Age on going to work and sex	Young persons formerly attending special classes						
	All cities		Detroit	Rochester	Newark	Cincinnati	California cities
	Number	Per cent distribution					
Boys	603		255	109	128	59	52
Age reported	596	100	253	109	125	59	50
Under 14 years	11	2		1	4	2	4
14 years	70	12	6	6	38	11	9
15 years	240	40	96	46	46	36	16
16 years	244	41	135	53	30	10	16
17 years and over	31	5	16	3	7		5
Age not reported	7		2		3		2
Girls	346		136	101	53	22	34
Age reported	344	100	135	101	53	21	34
Under 14 years	4	1	2	1	1		
14 years	18	5	1	1	9	1	6
15 years	112	33	34	41	21	6	10
16 years	171	50	74	52	16	14	15
17 years and over	39	11	24	6	6		3
Age not reported	2		1			1	

The child labor laws in effect in the various cities in which the young persons lived did not permit children under 16 to work in most occupations (domestic service and farm work were the usual exceptions) unless they obtained employment certificates. Only one young person included in the study had completed the grade requirements for employment certificates,[15] and altogether 474 boys and girls, according to the child labor laws of the States in which they lived, should have obtained employment certificates when they first went to work for the occupations in which they were employed. From the records at the employment-certificate offices information was obtained regarding 356 of these boys and girls; 197, or 55 per cent of these (132, or 53 per cent, of the boys, and 65, or 62 per cent, of the girls) had failed to get employment certificates before they went to work. (Table 10.) Most of the young persons who had succeeded in getting certificates lived either in Cincinnati, where mentally defective boys of 15 years and over were exempted from the educational requirements of the law, or in Newark, where it appeared to be the practice to issue employment certificates to mentally defective children over 14 years of age, regardless of whether or not they met the grade qualifications.

[15] Employment certificates were not necessary for children 16 years of age and over in any of the cities except Cincinnati, where the law required girls up to 18 years of age to get work permits, and Oakland, where after the autumn of 1920 they were required for children up to 17 years of age.

TABLE 10.—*Working papers required and obtained by boys and girls formerly attending special classes in seven specified cities*

Working papers and sex	Young persons formerly attending special classes					
	All cities	Detroit	Rochester	Newark	Cincinnati	California cities
Total	949	391	210	181	81	86
Boys	603	255	109	128	59	52
Working papers required	326	101	49	92	50	34
Obtained	119	6	2	64	33	14
Not obtained	132	66	9	27	16	14
Not reported whether obtained	75	29	38	1	1	6
Working papers not required	272	152	58	35	9	18
Not reported whether required	5	2	2	1	----	----
Girls	346	136	101	53	22	34
Working papers required	148	38	42	30	22	16
Obtained	40	4	1	18	14	3
Not obtained	65	27	9	10	8	11
Not reported whether obtained	43	7	32	2	----	2
Working papers not required	197	98	58	23	----	18
Not reported whether required	1	----	1	----	----	----

The influence of the minimum-age requirement of the child labor laws in effect in the different cities for the issuance of employment certificates to children no doubt limited the employment of mentally defective children of less than the minimum legal age even where they went to work without certificates, although local custom was also a factor. For example, in Detroit, where the minimum working age at the time of the study was 15 years for children with employment certificates, only 2 per cent of the subnormal boys and girls went to work under this age. Ninety-two per cent of those who went to work after reaching the minimum age of 15 years, however, had no employment certificates. On the contrary, in Newark, where the law permitted the employment of children at 14 provided they had employment certificates, 29 per cent of the subnormal boys and girls went to work in or before their fourteenth year.

ASSISTANCE IN OBTAINING THEIR FIRST JOBS

Only 5 per cent of the boys and 7 per cent of the girls had any aid from school teachers, school placement bureaus, employment offices not connected with schools, or social-welfare agencies in getting their first jobs, according to the statements of the young persons and the records of placement offices. Thirty-one per cent of the boys and 38 per cent of the girls were assisted by friends or relatives in finding work. A small number (9 per cent of the boys and 1 per cent of the girls) were actually employed by their relatives. More than half of each sex were entirely dependent upon their own efforts in getting employment. A similar situation was found among children of unselected mentality, according to figures collected in 1922 by the New Jersey Council of Education for employed boys and girls attending continuation schools. Two per cent of these children were assisted in getting their first jobs by the school employment or other employment offices, 48 per cent had had the help of friends and relatives,

and 50 per cent had had no assistance.[16] Considering the special needs of the subnormal children and the interest taken in their problems by the special-class teachers, it is surprising that so few included in the study had had assistance in getting work. Vocational-guidance activities or juvenile-placement bureaus were found in several of the cities covered by the study. Rochester and Los Angeles had juvenile-employment offices, and Cincinnati and Oakland had vocational-guidance bureaus.[17] The lack of guidance and supervision for mentally deficient children was unfortunate not only because the transition from school to work, difficult enough for normal children, is particularly difficult for subnormal children, but also because many of the mentally inferior children entering industry did not have even the protection or supervision, slight though it may be, that the employment-certificate system provides for all employed children who obtain certificates before going to work.

CONTINUITY OF EMPLOYMENT

Nine-tenths (94 per cent) of the boys and girls who had attended special classes and were located in the course of the investigation had been employed after leaving school (see p. 3). Among the 949 for whom relatively complete employment records were obtained were 168 girls who had married and whose work histories were subject to interruption. The following discussion as to continuity of employment includes 603 boys and 178 unmarried girls. Of these only 3 boys were considered by their relatives as incapable of work, even at home, and 23 (17 boys and 6 girls) were in institutions for defectives or delinquents at the time of the study. The majority of both sexes were employed when interviewed. One hundred and seventy-four boys and 54 unmarried girls were unemployed; most of them claimed that this unemployment was temporary.

LENGTH OF POSSIBLE WORK HISTORY AND TIME EMPLOYED

A sufficient period had elapsed between the date the individuals included in the present study had left school and the date of the inquiry to show whether their employment was temporary or regular in character; that is, to show whether or not mentally defective individuals, who would be classified as imbeciles of the higher grades or as morons, can find and keep employment. The 949 individuals had all left school from a little less than three and a half years to a little more than seven years before they were interviewed. The median period of time between the date that they left school and the date of the study (that is, the possible period during which they had an opportunity to work [18]) was nearly five years (59 months) for the boys and 4⅔ years (55 months) for the unmarried girls. (Table 11.)

[16] Unpublished figures furnished by the committee appointed by the New Jersey Council of Education to ascertain facts regarding employed minors attending continuation schools.

[17] A vocational bureau was established in Detroit in 1921, after the young persons in the present study had left school, and placement and follow-up work for special-class children was started in 1923. Since the study was made the schools in Los Angeles and San Francisco have also organized placement work for children from special classes. (Crockett, Alexander C., and James M. Clow: Occupations of Junior Workers in Detroit, School of Education, University of Michigan, Ann Arbor, 1923.) In Cincinnati the vocation bureau in 1920 organized a special committee to give advice and supervision to mentally defective children entering industry; this work was afterwards taken over by the social agencies of the city. (Report of the Mental Hygiene Survey of Cincinnati, May, 1922.)

[18] The length of the possible working period for all individuals was the time between the date of leaving school and the date of the study, including the 45 boys (6 per cent) and the 6 unmarried girls (3 per cent) who had been in institutions for some part of the time.

TABLE 11.—*Length of possible working period and number of months actually employed for boys and girls (unmarried) formerly attending special classes in seven cities*

Number of months actually employed and sex	Boys and girls (unmarried) formerly attending special classes					
	Total		Length of possible working period			
	Number	Per cent distribution	Less than 4 years	4 years, less than 5	5 years, less than 6	6 years and more
Boys	603		76	254	176	97
Number of months reported	573	100	72	241	170	90
Less than 12 months	23	4	5	10	5	3
12 months, less than 18	18	3	2	11	4	1
18 months, less than 24	38	7	11	18	7	2
24 months, less than 30	53	9	10	25	14	4
30 months, less than 36	66	12	11	33	16	6
36 months, less than 42	62	11	13	34	13	2
42 months, less than 48	98	17	20	38	31	9
48 months, less than 54	77	13		44	18	15
54 months, less than 60	72	13		28	28	16
60 months and more	66	12			34	32
Number of months not reported	30		4	13	6	7
Girls (unmarried)	178		44	73	45	16
Number of months reported	177	100	44	73	45	15
Less than 12 months	31	18	8	16	7	
12 months, less than 18	4	2	2		2	
18 months, less than 24	18	10	7	8	2	1
24 months, less than 30	13	7	4	4	1	4
30 months, less than 36	14	8	4	9	1	
36 months, less than 42	23	13	11	11		1
42 months, less than 48	22	12	8	10	4	
48 months, less than 54	20	11		12	5	3
54 months, less than 60	11	6		3	8	
60 months and more	21	12			15	6
Number of months not reported	1					1

The individuals included in the inquiry were employed the greater part of the time after they had left school. Approximately 75 per cent of the boys worked more than one-half their possible working period and about 40 per cent as much as three-fourths of the time. The unmarried girls were employed for shorter periods than the boys; 38 per cent of the boys and 29 per cent of the girls had worked four years or more, those with the longer work histories naturally reporting the longer periods of actual employment.

UNEMPLOYMENT

Although, of course, many factors that have nothing to do with mental ability are involved in unemployment, such as restlessness and other character traits, ill health, family situation, general industrial conditions, and other factors beyond the individual's control, the amount of their unemployment may be taken as at least one indication of the success or failure of individuals of subnormal intelligence in adjusting themselves to industrial life.

The amount of unemployment among these boys and girls who were formerly in special classes was greater than that generally found among workers of unselected mentality. The majority of the boys and girls in the present study had been out of work at least 20 per

cent of their possible working periods. (Table 12.) Twenty per cent of the boys and 34 per cent of the girls from special classes had been out of work half the time compared with 8 per cent of the boys and 11 per cent of the girls of unselected mentality included in a Children's Bureau study of employed minors between 15 and 18 years of age in Milwaukee. Only 29 per cent of the boys and 26 per cent of the girls of subnormal mentality had been unemployed less than one-tenth of the time contrasted with 63 per cent of the Milwaukee boys and the same proportion of the Milwaukee girls.[19] Employed children included in two other studies made by the Children's Bureau in Boston and in Connecticut likewise were unemployed a smaller proportion of the part of their industrial lives covered by these studies than the young persons of the present study.[20] Employed children between 14 and 18 in Cincinnati with work histories of four years, according to a study made in that city of 753 children at work,[21] also had relatively little unemployment. Three-fourths or more of these children were employed each year for 50 or more weeks.

TABLE 12.—*Percentage of unemployment among boys and girls (unmarried) formerly attending special classes in seven specified cities*

Percentage of unemployment and sex	Boys and girls (unmarried) formerly attending special classes						
	All cities		Detroit	Rochester	Newark	Cincinnati	California cities
	Number	Per cent distribution					
Boys	603		255	109	128	59	52
Percentage of unemployment reported	568	100	243	103	122	56	44
Less than 10 per cent	164	29	59	34	38	18	15
10 per cent, less than 20	85	15	42	12	15	10	6
20 per cent, less than 30	83	15	36	15	16	11	5
30 per cent, less than 40	66	12	26	17	15	6	2
40 per cent, less than 50	57	10	34	8	11		4
50 per cent, less than 60	46	8	20	5	11	3	7
60 per cent, less than 80	45	8	20	10	6	6	3
80 per cent and more	22	4	6	2	10	2	2
Percentage of unemployment not reported	35		12	6	6	3	8
Girls (unmarried)	178		67	50	32	12	17
Percentage of unemployment reported	176	100	66	50	32	12	16
Less than 10 per cent	46	26	15	14	6	7	4
10 per cent, less than 20	32	18	9	12	7		4
20 per cent, less than 30	14	8	5	5	2	1	1
30 per cent, less than 40	15	9	5	5	2	3	
40 per cent, less than 50	9	5	2	2	5		
50 per cent, less than 60	15	9	7	3	4		1
60 per cent, less than 80	16	9	6	5	3		2
80 per cent and more	29	16	17	4	3	1	4
Percentage of unemployment not reported	2		1				1

[19] Unpublished figures.

[20] The Working Children of Boston, p. 191 (U. S. Children's Bureau Publication No. 89, Washington, 1922); Industrial Instability of Child Workers, p. 34 (U. S. Children's Bureau Publication No. 74, Washington, 1920).

[21] Woolley, Helen Thompson: An Experimental Study of Children at Work and in School between the Ages of 14 and 18 Years, p. 559. New York, 1926.

Several differences between this study and other Children's Bureau studies of employed children enter into but do not seem to explain altogether the greater unemployment among the subnormal workers. The fact that the work histories of employed boys and girls of unselected mentality included in these other reports start with the date of their first employment after leaving school, and that of minors in the present study with the date they left school, accounts for part of the difference, especially between the girls in the two groups. The majority of the mentally deficient boys and girls, however, began work within a few weeks or one month after leaving school.

Another reason for the greater amount of unemployment among the subnormal workers may be that the employed minors in other Children's Bureau studies were of employment-certificate age in all the States except Wisconsin and were required under the child labor and school attendance laws to be either in school or at work, whereas about two-fifths of the minors of the present study were at least 16 years of age when they left school and were not subject to such a provision of law. In addition, according to reasons given on the school records of the special-class children, only 69 per cent of the subnormal boys and 55 per cent of the subnormal girls under 16 left school to go to work.

The longer possible work histories of the young persons of subnormal intelligence as compared with the possible work histories of the unselected groups of young workers in other cities do not explain the larger percentage of unemployment among the subnormal workers, because it has been demonstrated that unemployment among a group of children of unselected intelligence decreases as they grow older and spend a longer time in industry.[22] The greater amount of unemployment among mentally deficient young workers as compared with those of unselected mentality corresponds with the findings of the study of employed children in Cincinnati, that on the whole those from the lower school grades were unemployed relatively longer than those from the upper grades.[23] Similarly, in the Children's Bureau study of working children in Boston those who were one or two years retarded in school were unemployed a greater percentage of the time than those who had made normal progress in school.[24]

REASONS FOR UNEMPLOYMENT

Just how far variations in employment conditions in the different cities affected the amount of unemployment of young workers of unselected and of subnormal mentality included in various studies can not be ascertained. The fact that in the present study mentally defective boys from seven cities were all unemployed about the same proportions of their possible work histories (Table 14) would indicate that this factor is of small importance. Probably the effect of local differences in industrial conditions was somewhat neutralized by the long period of time covered in the present study, which included both the war years from 1917 to 1919, when business was prosperous and all kinds of labor in great demand, and the period of business depression during and after 1921, when an unusual amount of unemploy-

[22] See Industrial Instability of Child Workers, p. 31, and An Experimental Study of Children, p. 562.
[23] An Experimental Study of Children, p. 559.
[24] The Working Children of Boston, p. 192.

ment was found in all industrial centers.[25] It may have been particularly difficult, however, for the subnormal boys and girls to obtain employment during the winter of 1921.

The boys and girls themselves were asked the reason for their longest period of unemployment, but the responses to this question were not very satisfactory. Only a small proportion (14 per cent of the boys and 5 per cent of the girls) said that a slack season, a strike, or a general period of unemployment was the cause of their idleness. Fifty-five per cent of the boys and 36 per cent of the girls said that they were unable to get work or they appeared to the bureau agent who questioned them to have been indifferent on the subject of getting work. About 5 per cent of each sex said that the chief reason for their unemployment was due to seeking a better job, and 8 per cent of the boys and 16 per cent of the girls gave illness as the cause.

The reason that the girls had a greater amount of unemployment than the boys may be partly that the girls were kept at home to help with the housework or that their relatives feared they would get into some trouble if employed outside the home. One-fifth of the girls but few of the boys gave as a reason for their longest period of unemployment that they were needed at home. The probability that the girls found it no more difficult than the boys to get and keep employment and that some of their unemployment was voluntary is supported by the fact that nearly as large a proportion of the girls as of the boys were employed 90 per cent of the time, although a much larger proportion of the girls than of the boys were employed for very short periods. A tendency of girls in general to be unemployed somewhat more than boys has been brought out in several studies;[26] in a study in New York State of children attending continuation schools made by the New York State Department of Education this tendency was marked.[27] For other factors that may have entered into the unemployment of the subnormal children, see pages 18 and 20.

DURATION OF AND CHANGES IN POSITIONS

Duration of first positions.

The girls and boys in the present study on the whole kept their first positions but a short time.[28] The same is true of the duration of first positions of young workers as a whole. The majority of the individuals of subnormal intelligence (54 per cent of the boys and 52 per cent of the girls) kept their first positions less than six months, including nearly 40 per cent (about the same proportions of each sex) who left their first employer before three months had passed. (Table 13.) A small group, however (about one-third of each sex), had kept their first positions at least a year. A few were still employed in their first positions at the time the study was made, from three to seven years later. As has been stated (see p. 14), more than three-fifths of the young workers of subnormal intelligence started work before they

[25] According to figures for the number of persons employed in 53 industries compiled by the Bureau of Labor Statistics, the general employment index number, which was taken as 100 in 1923, was 115 and 114 in 1917 and 1918, and 85 and 88 in 1921 and 1922. Monthly Labor Review (U. S. Bureau of Labor Statistics), vol. 23, No. 2 (August, 1926), pp. 132, 134.

[26] The Working Children of Boston, p. 191; Industrial Instability of Child Workers, p. 32; The Working Children of Newark and Paterson, p. 37 (U. S. Children's Bureau Publication No. 199, Washington, 1930); An Experimental Study of Children, p. 603.

[27] New York State Education Department: Survey of Continuation-School Children. Statement issued July 8, 1929.

[28] By the term "position" is meant a continuous period of employment with one employer regardless of any change in occupation while with that employer; by the term "job" is meant the length of time in one occupation.

were 16. In the Children's Bureau study of employed minors of Milwaukee, who were about the same age as those of the present study when they started work, 62 per cent of the boys and 59 per cent of the girls whose first positions were ended, larger proportions than in the present study, had held their first positions less than three months; in a study of working children in Newark, N. J., all of whom went to work before they were 16, 48 per cent of the boys and about the same percentage of the girls whose first positions were ended had held these positions less than three months.[29] According to Children's Bureau studies of working children in Boston and in Connecticut the children's first positions were also found to have been of short duration.[30]

TABLE 13.—*Duration of first position and intelligence quotient of boys and girls (unmarried) formerly attending special classes in seven cities*

Duration of first position and sex	Boys and girls (unmarried) formerly attending special classes						
	Total		Intelligence quotient				
	Number	Per cent distribution	Less than 50	50, less than 60	60, less than 70	70 and more	Not reported
Boys	603		31	157	246	154	15
Duration reported	597	100	31	155	243	153	15
Less than 1 month	98	16	8	28	32	27	3
1 month, less than 3	121	20	6	27	52	31	5
3 months, less than 6	102	17	4	24	41	32	1
6 months, less than 1 year	94	16	4	22	40	26	2
1 year, less than 2	87	15	3	29	40	14	1
2 years, less than 3	45	8	3	11	21	10	
3 years and more	50	8	3	14	17	13	3
Duration not reported	6			2	3	1	
Girls (unmarried)	178		20	55	71	29	3
Duration reported	177	100	20	55	70	29	3
Less than 1 month	33	19	6	9	10	7	1
1 month, less than 3	36	20	6	6	18	6	
3 months, less than 6	23	13	1	11	8	2	1
6 months, less than 1 year	28	16	2	9	14	3	
1 year, less than 2	28	16	3	9	9	7	
2 years, less than 3	3	2			1	2	
3 years and more	26	15	2	11	10	2	1
Duration not reported	1				1		

Duration of longest positions.

The majority of both the boys and the girls in this study ultimately found work in which they were employed regularly for long periods. The median length of the longest position in which the boys had been employed during their work histories was 20 months; for the unmarried girls the median length was 19 months. One hundred and twenty-one boys and 59 girls were still employed at the time of the study in the jobs that they had held the longest. About twice as many girls as boys (17 per cent compared with 9 per cent) had held their longest position less than 6 months; but, on the other hand, as large a proportion of girls as of boys (37 per cent of each) had worked two years or

[29] Unpublished figures; The Working Children of Newark and Paterson, p. 39.
[30] The Working Children of Boston, p. 41; Industrial Instability of Child Workers, p. 38.

longer with one employer. (Table 14.) Mentally deficient girls who actually settle down to industrial employment appear to be as steady workers (that is, they have as little unemployment and work as regularly) as boys.

The long period that many individuals included in the study worked in one or more positions without a break of more than a week between positions also indicates that a considerable proportion of boys and girls who are classified as morons or high-grade imbeciles may be steady workers. Nearly two years (23 months) was the median length of time that both the boys and unmarried girls had worked continuously in one or more positions without a period of more than a week's idleness between positions. A small proportion of each sex, relatively more girls than boys (17, or 10 per cent, of the girls and 14, or 2 per cent, of the boys), had never worked continuously for three months at a time. This number includes 12 girls and 8 boys who had not been employed three months in the whole period between the time they left school and the date of the interview. On the other hand, a considerable proportion of each sex (30 per cent of the boys and 34 per cent of the girls) had worked continuously for three or more years.

TABLE 14.—*Duration of longest position and intelligence quotient of boys and girls (unmarried) formerly attending special classes in seven cities*

Duration of longest position and sex	Boys and girls (unmarried) formerly attending special classes						
	Total		Intelligence quotient				
	Number	Per cent distribution	Less than 50	50, less than 60	60, less than 70	70 and more	Not reported
Boys	603	----------	31	157	246	154	15
Duration reported	584	100	31	151	238	149	15
Less than 6 months	50	9	7	10	20	12	1
6 months, less than 1 year	101	17	2	28	33	35	3
1 year, less than 2	218	37	11	53	101	47	6
2 years, less than 3	113	19	7	29	48	28	1
3 years and more	102	17	4	31	36	27	4
Duration not reported	19	----------	----------	6	8	5	----------
Girls (unmarried)	178	----------	20	55	71	29	3
Duration reported	178	100	20	55	71	29	3
Less than 6 months	30	17	7	9	8	6	----------
6 months, less than 1 year	25	14	1	10	14	----------	----------
1 year, less than 2	57	32	3	18	21	14	1
2 years, less than 3	22	12	6	3	7	5	1
3 years and more	44	25	3	15	21	4	1

Changes in positions.

The number of changes an individual makes in his positions is one indication of his stability as a worker, provided he does not remain unemployed for the greater part of his possible work history, as did a small proportion of the mentally deficient young persons who had but one position. Even long periods of time spent in one position and infrequent or no changes in position do not necessarily indicate occupational success. Often the individuals who lack initiative and

ability to progress are the ones who make few changes. Some of these young persons of subnormal mentality who worked for a long time in one position or who made few or no changes were those who held inferior positions and were probably incapable of holding better ones. (See cases 13, 15, 17, 18, and 19, pp. 46–48.)

The boys who had the shorter possible working periods usually held somewhat fewer positions than those with longer working periods; those with work histories of three to four years had five or six positions as compared with seven or eight for those with work histories of six years or more. (Table 15.) On the other hand, girls with the shorter working periods usually held about the same number of positions (about four) as those who had the longer working periods.

TABLE 15.—*Length of possible working period and number of positions held by boys and girls (unmarried) formerly attending special classes in seven cities*

Number of positions and sex	Boys and girls (unmarried) formerly attending special classes					
	Total		Length of possible working period			
	Number	Per cent distribution	Less than 4 years	4 years, less than 5	5 years, less than 6	6 years and more
Boys	603		76	254	176	97
Number of positions reported	586	100	74	248	170	94
1 or 2	78	13	15	32	19	12
3 or 4	111	19	18	52	30	11
5 or 6	124	21	17	49	37	21
7 or 8	99	17	10	44	28	17
9 or 10	69	12	4	30	21	14
11 or 12	42	7	3	14	20	5
13 or 14	26	4	2	14	8	2
15 or more	37	6	5	13	7	12
Number of positions not reported	17		2	6	6	3
Girls (unmarried)	178		44	73	45	16
Number of positions reported	175	100	43	73	45	14
1 or 2	62	35	19	21	19	3
3 or 4	42	24	8	18	12	4
5 or 6	36	21	7	17	8	4
7 or 8	18	10	5	7	4	2
9 or more	17	10	4	10	2	1
Number of positions not reported	3		1			2

Obviously the amount of shifting between positions can not be measured exactly by the number of positions held, as the length of possible work histories varied from three and one-half to seven years and the boys with the longer working periods usually held more positions than those with shorter working periods. To indicate better the amount of shifting from one position to another, the workers were grouped according to the average number of changes in positions per year they had made during their working period. (Table 16.) One of the groups consisted of workers who had made less than one change per year (Group A in Table 16), another group of workers who had made one change but less than two changes per year (Group B), and another group of those who had made two or more changes a year (Group C).

TABLE 16.—*Average number of changes in positions per year during working period and percentage of unemployment for boys and girls (unmarried) formerly attending special classes in seven cities*

Percentage of unemployment	Boys and girls (unmarried) formerly attending special classes														
	Boys									Girls (unmarried)					
	Total		Average number of changes in positions per year							Total		Average number of changes in positions per year				
			Group A, less than 1		Group B, 1, less than 2		Group C, 2 or more					Group A, less than 2		Group B, 1, less than 2	Group C, 2 or more	
	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Not reported	Number	Per cent distribution	Number	Per cent distribution	Number [1]	Number [1]	Not reported
Total	603	----	222	----	225	----	131	----	25	178	----	108	----	49	18	3
Percentage of unemployment reported	568	100	216	100	218	100	120	100	14	176	100	108	100	48	17	3
Less than 10	164	29	99	46	44	20	17	14	4	46	26	36	33	8	2	---
10, less than 30	168	30	46	21	79	36	38	32	5	46	26	23	21	14	7	2
30, less than 50	123	22	31	14	51	23	39	33	2	24	14	8	7	12	4	---
50 and more	113	20	40	19	44	20	26	22	3	60	34	41	38	14	4	1
Percentage of unemployment not reported	35	----	6	----	7	----	11	----	11	2	----	----	----	1	1	---

[1] Per cent distribution not shown because number of girls was less than 50.

A large number of boys and girls changed positions on an average of less than once a year. Girls, as has already been indicated, made fewer changes than boys; 62 per cent as compared with 38 per cent of the boys averaged less than one change for each year of their work history. A relatively small proportion of either sex (10 per cent of the girls and 23 per cent of the boys) changed positions two or more times a year.

Comparisons of the amount of shifting of positions among the individuals from special classes with that among groups of young workers of unselected mentality are misleading unless the long periods of unemployment among the former are taken into account. Among children of unselected mentality, those who seldom change positions generally have relatively little unemployment.[31] However, many of the young workers from special classes who had seldom changed positions, as well as those who had changed positions frequently, had a great deal of unemployment. Nineteen per cent of the boys who had made less than one change a year had been out of work at least half the time. About the same proportions of boys who had changed positions more frequently had also been out of work at least half the time; 20 per cent of the boys who had changed positions once but less than twice a year and 22 per cent of the boys who had changed two or more times a year. Thirty-eight per cent of the girls

[31] See The Working Children of Boston, pp. 186, 193–194; The Working Children of Newark and Paterson, p. 42.

who had changed less than once a year and 28 per cent of those who had shifted more often had been unemployed half of their possible working periods. The girls, as has been said, changed their positions less than the boys but on the whole they reported more unemployment.

The mentally deficient boys and girls changed their positions somewhat less frequently than the boys and girls employed in Milwaukee. The work histories of the latter were from one to four years in length, not so long as those of the workers in the present study. Only 18 per cent of the Milwaukee boys, compared with 38 per cent of those in the present study, changed positions less than once a year; 33 per cent of the Milwaukee boys and 23 per cent of the subnormal boys changed positions twice or more a year. The difference between the Milwaukee girls and the subnormal girls was even more marked.[32] The working children of Boston, none of whose work histories was more than two years in length, also shifted positions more frequently than the boys and girls of the present study.[33] These differences between the workers of unselected and of subnormal mentality were probably not due to differences in industrial conditions in Milwaukee and Boston and in the cities covered by the present study. At least the subnormal boys from the various cities averaged about the same number of positions and about the same length of work history, with the exception of the small number from the California cities, whose positions were fewer in number. The differences between the two groups are no doubt explained partly by the differences in the length of their work histories, as boys and girls change their positions more frequently during their first years of work than subsequently.[34] Boys and girls of unselected mentality who had worked as many years as the boys and girls of subnormal intelligence would be expected, therefore, to shift their positions less than those whose work histories were shorter. Unfortunately no comparable figures are available for young persons with as long work histories as the mentally deficient boys and girls included in this study. It can not be concluded, however, that the subnormal workers were steadier workers than the young persons employed in Milwaukee and in Boston just because they changed positions less frequently, for, as has been shown, the subnormal workers had more unemployment than the workers of normal intelligence.

FACTORS AFFECTING CONTINUITY OF EMPLOYMENT

Intelligence Levels.

As former special-class pupils have more unemployment than other young workers, it might be expected that those of the lower intelligence levels would be more irregular workers than those of the upper levels. This, however, was not true. Little difference appeared in the amount of unemployment and in the duration of positions among those of different grades of intelligence. Forty-six per cent of the boys with intelligence quotients between 50 and 60, and 37 per cent of those with intelligence quotients of 70 or more, had been unemployed less than one-fifth of the time, not a marked difference. (Table 17.) The number of girls was too small to show whether or not the amount of unemployment and the duration of their positions varied

[32] Unpublished figures.
[33] The Working Children of Boston, p. 187.
[34] According to the study by Doctor Woolley of Cincinnati boys and girls who had worked four years, the number of positions held each year decreased among both boys and girls. For boys the average number of positions a year for the successive years was 2.2, 1.9, 1.7, and 1.5. An Experimental Study of Children, p. 565.

with intelligence levels, but for those whose intelligence quotients were 50 or more no trend was apparent. (Table 18.)

TABLE 17.—*Percentage of unemployment and intelligence quotient of boys formerly attending special classes in seven cities*

Percentage of unemployment	Boys formerly attending special classes									
	Total		Intelligence quotient							
			Less than 50	50, less than 60		60, less than 70		70 or more		Not reported
	Number	Per cent distribution	Number[1]	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	
Total	603	-------	31	157	-------	246	-------	154	-------	15
Percentage of unemployment reported	568	100	28	148	100	229	100	150	100	13
Less than 10 per cent	164	29	6	49	33	72	31	33	22	4
10 per cent, less than 20	85	15	5	19	13	35	15	23	15	3
20 per cent, less than 30	83	15	4	17	11	36	16	26	17	-------
30 per cent, less than 40	66	12	1	21	14	27	12	16	11	1
40 per cent, less than 50	57	10	2	11	7	23	10	21	14	-------
50 per cent, less than 60	46	8	2	15	10	12	5	15	10	2
60 per cent, less than 80	45	8	2	10	7	18	8	13	9	2
80 per cent and more	22	4	6	6	4	6	3	3	2	1
Percentage of unemployment not reported	35	-------	3	9	-------	17	-------	4	-------	2

[1] Per cent distribution not shown because number of boys was less than 50.

TABLE 18.—*Percentage of unemployment and intelligence quotient of girls (unmarried) formerly attending special classes in seven cities*

Percentage of unemployment	Girls (unmarried) formerly attending special classes					
	Total	Intelligence quotient				
		Less than 50	50, less than 60	60, less than 70	70 or more	Not reported
Total	178	20	55	71	29	3
Percentage of unemployment reported	176	20	54	70	29	3
Less than 10 per cent	46	3	15	20	6	2
10 per cent, less than 20	32	1	10	13	8	----------
20 per cent, less than 30	14	3	2	7	2	----------
30 per cent, less than 40	15	3	6	5	----------	1
40 per cent, less than 50	9	----------	4	2	3	----------
50 per cent, less than 60	15	1	5	7	2	----------
60 per cent, less than 80	16	2	4	7	3	----------
80 per cent and more	29	7	8	9	5	----------
Percentage of unemployment not reported	2	----------	1	1	----------	----------

Individuals of the lower grades of intelligence, at least among the boys, made fewer changes in position than those of the upper levels. Forty-seven per cent of the boys with intelligence quotients between 50 and 60 as compared with 30 per cent of those with intelligence quotients of 70 or more changed positions on an average of less than

once a year. No such difference was apparent among the girls. (Table 19.) Very likely individuals with intelligence quotients of less than 70 find it more difficult than those of higher grade to get employment, but having once found suitable work they are as likely as those of the upper levels to hold their positions.

Although the number of individuals, both boys and girls, with intelligence quotients of less than 50 is too small to form any definite conclusions as to whether the continuity of their employment was related to their inferior intelligence, it should be noted that a relatively larger number of them than of those with greater intellectual capacity (10 of 28 boys and 10 of 20 girls) had been unemployed at least half the time, and that, on the other hand, a relatively smaller number (11 boys and 4 girls) had been unemployed only 20 per cent of the time or less. Twenty individuals whose intelligence quotients were under 50 had stayed in one position for two years or more. A number of individuals had intelligence quotients so low that one might expect them to be unemployable. The two individuals whose intelligence quotients were the lowest of any in the study (about 20 according to the Goddard Revision of the Binet test), however, had found work that they could do, one of them having been employed practically all the five years after he had left school and the other, three out of six years. (See case 13, p. 46.) On the other hand, the boy with the next lowest intelligence quotient (33) had worked only six months out of five and a half years. A girl with an intelligence quotient of 38 had been employed for only three weeks, and a boy with an intelligence quotient of 37 had been employed for only seven or eight weeks of a 5-year period. (See case 16, p. 47.)

TABLE 19.—*Average number of changes in positions per year during possible working period and intelligence quotient of boys and girls (unmarried) formerly attending special classes in seven cities*

Average number of changes in positions during possible working period and sex	Boys and girls (unmarried) formerly attending special classes						
	Total		Intelligence quotient				
	Number	Per cent distribution	Less than 50	50, less than 60	60, less than 70	70 and more	Not reported
Boys	603		31	157	246	154	15
Changes reported	578	100	30	151	237	149	11
Group A, less than 1 change per year	222	38	17	71	84	45	5
Group B, 1, less than 2 changes per year	225	39	8	46	101	67	3
Group C, 2 or more changes per year	131	23	5	34	52	37	3
Changes not reported	25		1	6	9	5	4
Girls (unmarried)	178		20	55	71	29	3
Changes reported	175	100	20	55	68	29	3
Group A, less than 1 change per year	108	62	14	32	45	15	2
Group B, 1, less than 2 changes per year	49	28	6	17	14	11	1
Group C, 2 or more changes per year	18	10		6	9	3	
Changes not reported	3				3		

A tendency for children with intelligence quotients of less than 70 to stay longer in their positions than those with intelligence quotients of 70 or more was found in a study of former pupils of special classes

in the Cincinnati public schools.[35] The intelligence quotients of most of the children included in this study who had an employment history were at least 50, as in the present study. It is possible that the long periods of steady employment in one position of individuals of the lower intelligence levels imply a willingness to stick to tasks that are irksome and monotonous to those with more intelligence, but no doubt the unfavorable personalities of some of those with relatively good mental capacity also affected the duration of their positions.

Delinquency and behavior.

The importance of conduct and character traits in relation to industrial success is generally recognized and has been emphasized in several studies concerning the mentally deficient.[36] Doctor Anderson in a study of the careers of 322 feeble-minded persons formerly in special classes found that individuals handicapped by personality difficulties held their positions for only short periods, whereas practically all those holding positions for two or three years at a stretch were in large measure free from serious personality difficulties. "The same qualities of character and personality makeup," he says, "and the same factors in training that make for the successful career of a normal child bear with equal force on the career of the feeble-minded child." [37]

If pupils of special classes were entirely unselected so far as their behavior is concerned, the findings concerning the relation between their intelligence and their unemployment and stability would have more significance. Probably, however, as has been said, more of the subnormal boys and girls of the higher intelligence ratings had behavior difficulties than those of the lower ratings. (See p. 8.) The prevalence of character defects among the boys of the upper intelligence levels may explain why they had as much unemployment as those of relatively inferior intelligence. (See cases 6, 7, 8, 9, pp. 32, 33, and also cases 15 to 21, pp. 91 to 93, concerning the afterhistories of former patients from Illinois State institutions.)

Information obtained for this study from court records does not bring out a clear relationship between delinquency and unemployment; but the number of young workers, even of boys, whose behavior resulted in court action, especially after they started work, is so small that any differences in the amount of unemployment among the delinquent and the nondelinquent boys are inconclusive. Excluding boys who had been in institutions during part of the time they might otherwise have worked between the date of leaving school and the date of the study, only 72 boys had ever been on probation. Of these boys 20 per cent, compared with 17 per cent of the nondelinquent boys, had been out of work at least half of their possible work history.

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[35] Woolley, Helen T., and Hornell Hart: Feeble-minded Ex-School Children; a study of children who have been students in Cincinnati special schools. Studies from the Helen S. Trounstine Foundation, vol. 1, No. 7 (April, 1921).

[36] Fernald, Walter E.: Thirty Years' Progress in the Care of the Feeble-minded (Proceedings and Addresses of the Forty-Eighth Annual Session of the American Association for the Study of the Feeble-minded, May, 1924, p. 206); Burr, Emily: Adjustment of the Feeble-minded in Industry, p. 6 (Reprint from the Proceedings of the Fiftieth Annual Session of the American Association for the Feeble-minded, June, 1926); Potter, H. W., M. D., and Crystal L. McCollister: A Résumé of Parole Work at Letchworth Village, N. Y. (Proceedings and Addresses of the Fiftieth Annual Session of the American Association for the Study of the Feeble-minded, June, 1926, p. 176).

[37] Anderson, V. V., M. D., and Flora M. Fearing: A Study of the Careers of 322 Feeble-minded Persons, pp. 17 and 30. National Committee for Mental Hygiene, New York, 1923.

School progress.

Little or no relation was found between steadiness in holding positions and the school progress of the young persons in the special classes. On the whole, those from the upper grades, both boys and girls, kept their positions no longer than those from the lower grades, excepting only those whose work was extremely poor. Young persons who had finished only first-grade work, or who had not succeeded even in that, kept their positions for somewhat shorter periods than those from grades above the first.

Special-class children of the lower as well as of the upper levels of intelligence do satisfactory handwork in school. (See p. 11.) Ability to do handwork was related to the amount of their unemployment and to the length of time they kept their positions. The boys who had done poor handwork while attending special classes were more likely than those who had done good work to report a great deal of unemployment. For example, twice as many boys who had done poor work as of those who had done good work (28 per cent compared with 15 per cent) had been unemployed at least half their possible work histories. (Table 20.) Only 27 per cent of the boys who had done poor work, compared with 44 per cent of those who had done good work, had been employed in one position for two years or more. A similar tendency to unemployment among girls who had done poor or only fair handwork at school, compared with those who had done good work, was also noted.

TABLE 20.—*Percentage of unemployment and quality of handwork while in special classes; boys and girls (unmarried) formerly attending special classes in seven cities*

Percentage of unemployment	Boys and girls (unmarried) formerly attending special classes												
	Boys								Girls (unmarried)				
		Quality of handwork								Quality of handwork			
		Good		Fair		Poor							
	Total	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Not reported [1]	Total	Good	Fair	Poor	Not reported [2]
Total	603	199	-----	134	-----	95	-----	175	178	74	40	29	35
Percentage of unemployment reported	568	192	100	124	100	87	100	165	176	74	40	27	35
Less than 10 per cent	164	58	30	31	25	27	31	48	46	21	8	6	11
10 per cent, less than 20	85	33	17	19	15	10	11	23	32	16	6	3	7
20 per cent, less than 30	83	34	18	17	14	8	9	24	14	8	3	1	2
30 per cent, less than 40	66	21	11	15	12	5	6	25	15	7	3	2	3
40 per cent, less than 50	57	18	9	17	14	13	15	9	9	7	-----	1	1
50 per cent, less than 60	46	12	6	12	10	9	10	13	15	3	5	1	6
60 per cent, less than 80	45	11	6	12	10	7	8	15	16	9	3	4	-----
80 per cent or more	22	5	3	1	1	8	9	8	29	3	12	9	5
Percentage of unemployment not reported	35	7	-----	10	-----	8	-----	10	2	-----	-----	2	-----

[1] Includes 3 boys who did not receive industrial training.
[2] Includes 2 girls who did not receive industrial training.

Physical defects.

The amount of unemployment and the length of time worked continuously in any one position was about the same for the young persons with physical defects as it was for those without physical defects, so that in most cases probably the defects that had not been remedied by the time the child began work were not sufficiently serious to interfere with his employment. Of course, in some individual cases physical difficulties were obviously a cause of unemployment. For example, among the 20 boys and girls who had been out of work most of the time and whose total employment amounted to less than three months were 2 boys and 2 girls who were epileptic, 1 girl who was seriously crippled, 1 girl whose speech was defective, and 1 girl and 1 boy who were extremely nervous.

CASES ILLUSTRATING CONTINUITY OF EMPLOYMENT

The following 12 case histories are examples of the work experiences of former pupils of special classes. In the first four cases the boys or girls had worked a large proportion of their possible working periods with few changes in positions. In the remaining cases they had worked irregularly. The cases show the relation between the regularity of work and the behavior of the individual—especially cases 5 to 12 in which the work was unsatisfactory—but do not show any relation between the regularity of work and the intelligence quotients.

Case 1 (Detroit).—Edith, a girl whose intelligence quotient was 66,[38] had proved to be a stable worker, having been employed in one position for more than four years out of an industrial history of five years. A prognosis made on the basis of school reports might have been unfavorable. Her teachers considered her stubborn, quarrelsome, selfish, and lazy, although she had sufficient intelligence to do about fifth-grade work in some academic subjects, and had done good work in industrial subjects. She spent most of the first year after leaving school at home. When 16 she obtained a position with a mailing and binding company which she was still holding after four years. She began first by folding and counting pamphlets and at the end of two years became a stitching-machine feeder. When the Children's Bureau agent interviewed her employer Edith was beginning her fifth year with the firm, and she was considered an experienced and satisfactory employee. When visited at her home the girl was neatly dressed and courteous in manner and made a very good impression.

Case 2 (Detroit).—Bertha, a girl whose intelligence quotient was 54, also proved to be a stable worker. She had held two positions in the 6-year period between the time she left school and the date of the study, and had been unemployed only a week during that time. In school she had done fourth-grade work in academic subjects and had been rated as good in cooking and in laundry work. Her teachers said that she was able to concentrate on her work, was neat in appearance, and had a likable personality. She was 16 years of age when she left school. She had done housework on part time for a private family before leaving school and continued this work for some months after leaving. Her employer considered her a good steady worker. After leaving this position she found work, almost at once, in the paper-box department of an establishment manufacturing chemists' supplies. She stayed with this company, doing various kinds of work, for nearly five years and was still employed there at the age of 22 when visited. She said, however, that she was planning to give up her job to be married.

Case 3 (Detroit).—Charles, a boy whose intelligence quotient was 65, had had but one position in six and a half years. He had done fourth-grade work in academic subjects and seventh-grade work in manual arts in the prevocational class. According to his teacher, he had a pleasing personality and was capable of concentrating on his work, but he was easily led. He left school at the age

[38] The intelligence quotients given in the case histories were based on the Stanford revision of the Binet-Simon test unless otherwise stated, the tests being given about the time the special-class students left school.

of 15 years and was idle for a whole year. Through a friend he finally found a position in a slaughterhouse "penning hogs." He had been in this one place for nearly five years at the time of the interview and was still employed. His wages had been more than doubled during this time.

Case 4 (Newark).—Arthur's intelligence quotient (Goddard revision) was only 51. He had worked practically all the period, nearly five years, since leaving school and had had but three positions. He had done almost nothing in regular school subjects, either in the regular grades or in the special class, which he had attended more than six years, but he had done good work in woodworking, chair caning, and brush making. When he was tested the examiner stated that he was interested and able to concentrate. Immediately on leaving school at the age of 15 years he obtained work painting trunk handles in a factory. He left this at the end of two months for a better-paying position in a cocoa factory. He remained there for two years, working in a variety of occupations from shoveling cocoa beans to testing the temperature of the hot chocolate with a thermometer. When a reduction in wages was about to be made he found another position, this time as helper on a truck, which he was still holding at the age of 20 when he was visited at his home two years later. His mother said she depended on the money he earned ($30 a week) as much as on her husband's wages.

Case 5 (Detroit).—Gertrude, a girl with an intelligence quotient of 60, had worked very irregularly, having been unemployed 71 per cent of the 2½ years between the date she left school and the date of her marriage. In this time she had had 11 positions. When she left school at 16 years of age she was doing about fourth-grade academic work in the special class. Her handwork was rated as fair. Her personal appearance was good, but she was unable to concentrate long on any particular piece of work. She was further handicapped by her delinquent tendencies, having been in court after leaving school twice for larceny, once for shoplifting. Most of her positions were in factories, but she had also worked as waitress in a restaurant. Six of the 11 positions she kept for less than a month, 1 of them for only two days; 1 position, however, she managed to hold for six months. From only one of these positions was Gertrude known to have been discharged; her excuses for leaving the others were various, such as dislike of the foreman, dislike of her surroundings, "unpleasant odors," and just because she "wanted a change."

Case 6 (Newark).—Theodore, a boy whose intelligence quotient was 57, had had 14 different positions in 4½ years, although he had been employed only about one-fifth of the time. He had done an equivalent of third-grade work in regular school subjects and sixth-grade work in industrial subjects. His work in industrial subjects, however, was poor. His teachers said that his attention was easily distracted, that he was easily led, stubborn, excitable, and irritable, and that he had a violent temper. Soon after he left school he was brought to court on a delinquency charge and was in jail for a few weeks. Theodore may have developed a restless disposition by his early experiences. Before he was old enough to leave school, between the ages of 6 and 13, he had lived at no less than 15 different addresses, and between that time and the date of the study he was reported to have lived in at least 10 other places. Most of his positions he kept only a few months; his two longest positions lasted six and seven months each. In the first year after leaving school he was employed less than three months in all by three employers. He tried working as messenger for a telegraph company and as helper to a mason. He then enlisted in the Navy but probably deserted, for within four months' time he enlisted in the Army under another name. During the next two years he deserted and reenlisted in the Army three times, after which he was dishonorably discharged. He returned home and for the next year alternated between factory and farm work, then enlisting again in the Army. Five months after this enlistment he was sentenced to be dishonorably discharged and to be confined at hard labor for five months, having been convicted of concealing his previous dishonorable discharge from the Army.

Case 7 (Detroit).—Martin was a Russian by birth. He had attended school in Russia before coming to this country and had then spent about 3½ years in special classes here. His intelligence quotient (Goddard revision) was 64. At the time he left school at the age of 15½ years he was rated as a fourth-grade student in regular-school sujects and as good in handwork. He had considerable mechanical ability, and it was thought that he would be able to find suitable employment in some factory. His afterhistory, however, was disappointing. Of the five years that had elapsed after he left school he had spent two months

in a reformatory. He had held eight positions and had been unemployed for about 24 months. Immediately on leaving school he obtained work on a machine in a wheel-manufacturing establishment but after two months "wanted a change" and went to another factory where he remained only two weeks. He next wandered off to Indiana, working during the fall months on any farm where he could get a job. When work gave out he returned to Detroit and found a position in a restaurant. He was discharged from this job for insubordination after a month. He next joined the Army. After a year and three months he is thought to have deserted. When next heard of he was in a State reformatory to which he had been sentenced for breaking and entering a schoolhouse. About a year later he was paroled but immediately ran away. At the time of the survey his whereabouts was unknown.

Case 8 (*Detroit*).—Richard had an intelligence quotient of 71 and had been unemployed for 70 per cent of a 4-year period, having had 12 positions. When transferred to the special class, a year before leaving school, he was in the fifth grade. His special-class teacher said that he was an obedient boy and able to concentrate but was suggestible, easily led, and quarrelsome. He had no court record. He went to work at the age of 16 on a delivery wagon for a store, a position that he kept only two weeks. At one time he had a job as truck driver, and several times he was employed as salesman in a store. He had also worked in factories, and twice he had tried farm work. The longest time he ever stayed with one employer was four months. Most of his positions he left of his own accord or was laid off because the work was temporary; only once had he been discharged as incompetent. His mother told the bureau agent that his inability to keep a job for "more than a few weeks at a time" was due to "lack of ambition."

Case 9 (*Rochester*).—Raymond with an intelligence quotient of 77 (Goddard revision), higher than that of most special-class pupils, was another unstable worker. He had left school five years before the study was made but had spent two years in an institution for delinquent boys. In the remaining 3-year period he had had 12 positions. Raymond had been considered "incorrigible" in regular grades in school and had been a truant. He had been transferred to the Rochester prevocational school, where he stayed for two years, doing the equivalent of fourth-grade work in regular-school subjects. His handwork was poor. His teachers found him quarrelsome and untruthful. He had a long court record before and after leaving school, having been taken to court for stealing, disorderly conduct, and vagrancy. For parts of three winters he worked in shoe factories, at one time for seven months, the longest time he ever stayed with any employer. His summer positions, helping at stands in amusement parks, usually lasted between one and three months.

Case 10 (*Newark*).—Philip was another boy whose intelligence quotient (78) was relatively high as determined by the only test he had had (Goddard revision). He had had 12 positions with 7 employers in the 65 months of his possible working period, and he was unemployed two-thirds of the time. He was in the sixth grade when he left school at 14½ years of age. He had spent only a week in the special classes, having been transferred from the regular grades only the week before he decided to leave school. He had a court record for delinquency before leaving school and had been on probation, but no details regarding his delinquency history were available. The duration of his positions varied from 16 days to 4 months. Seven of his positions he had kept two months or less. He had worked in factories, as helper on an ice wagon, as helper to a peddler, and as a bootblack. He could give no reason for leaving some of his jobs but apparently left several because "work was slack." One of his employers for whom he had worked at two different times, once for more than three months, said the boy was a good worker but "did not stay long in a job."

Case 11 (*Rochester*).—In the 5½ years of his possible work history Frank was unemployed 41 per cent of the time and had had 12 positions. His intelligence quotient was 79 (Goddard revision). His teachers reported that he was indifferent and lazy in school, had a domineering personality, and was a truant. He had been taken to the juvenile court for "shooting" craps and placed on probation. When he left school at the age of 15 after 6½ years in the prevocational school he had completed only the equivalent of the third grade in academic subjects. On leaving school he began to wander about from place to place. Within the 5½-year period he visited many cities, working at any job he could find for a few weeks or months until he had money enough to move on. Most of his jobs lasted less than three months, but once he devoted more than a year and a half irregularly to training and taking part in boxing matches. At the time of

the interview he had been home with his parents for seven weeks and had been working most of that period.

Case 12 (Newark).—Ned proved to be a hopelessly unstable worker. In the four years after leaving school he had tried at least 27 jobs and had been out of work at least two-thirds of the time. His intelligence quotient was 51 (Goddard revision). When he was 14 years of age and attending the fifth grade he was transferred to a special class where he remained for a year. His attendance was irregular and his conduct poor, the teacher saying of him that he was stubborn, quarrelsome, possessed of a violent temper, and noticeably unclean and slovenly in appearance. He was a sex offender and had been arrested and put on probation by the juvenile court.

At 15 he obtained his working papers. In his first year at work he had had 10 jobs which he or his mother remembered. His first employment was as sprayer for a large electrical-equipment company, for which he received $12 a week. He remained nearly three months in this position, the longest he ever stayed with one employer. At the end of that time he was discharged because he was insubordinate and "absent from work too often." He next worked as helper on a wagon for a small furniture store. He kept this job about a month, receiving $8.50 a week. He said he left because he "wanted a change of work"; his employer said he was "unreliable about coming to work." In his third job as a tester in the chemical department of a celluloid-manufacturing company he remained three weeks. His fourth job, piling skins for a leather manufacturer, he kept one day, leaving because the work was "too wet." Next he took a job "leading horses" for a blacksmith at $5.50 a week from which he was "laid off" after a couple of weeks. His sixth job was as teamster for a contractor, with the comparatively high wage of $21 a week; however, he was discharged for absenteeism after two weeks. He remained one day at his seventh job, as teamster in a lumber yard; the work, he said, was "too hard." His eighth job was operating a machine in the heating department of a factory manufacturing auto horns where he remained a week, leaving because the work was "too hot." His ninth job was as teamster for a trucking company from which he was discharged without explanation. His tenth job also, which lasted for 12 days, was as teamster. In his second year his work record was a repetition of the first year; he was out of work a great deal and had six positions, one of which, as helper on an ice wagon, he kept for 2½ months, the others from a few days to two weeks. In the next two years, the period before the time he was visited, he had 11 positions. His mother said that during this period he did not work steadily for any one employer, but she thought he averaged about one day's work a week, just enough to get his "spending money."

In all he had been discharged from seven of the positions he had held, usually for unreliability and absenteeism. He gave a variety of reasons for leaving his jobs besides the ones already mentioned, such as "too long hours" or because he was "called down for being late." At least three of his employers—an ice dealer, a truckman, and the superintendent of a can company where he had shoveled coal—reported that although he was lazy he was as satisfactory as most of their employees at this type of casual labor. The boy was supported by his parents, with whom he lived.

OCCUPATIONS

The cities included in the study offered a considerable variety of work in manufacturing as well as in commercial occupations. The eastern and midwestern cities, Cincinnati, Detroit, Newark, and Rochester, are important manufacturing centers, Detroit being the center of the automobile industries and the other cities having widely diversified industries. The metal trades of Cincinnati, Newark, and Rochester, as well as of Detroit, employ large numbers of wage earners, and the clothing trades are important in each of the three cities. The manufacture of electrical supplies is important in Newark and Rochester; the manufacture of shoes and furniture in Rochester and Cincinnati. Button, candy, and paper-box factories in Rochester and candy and tobacco factories in Newark also offer opportunities for work. The California cities, Los Angeles, Oakland, and San Francisco, although not so important industrially, have

metal and lumber industries and food-packing establishments that employ large numbers of persons.[39]

FIRST AND LAST OCCUPATIONS

Table 21 shows the occupational distribution of the mentally deficient workers in their first and last jobs.[40] The majority (55 per cent of the boys and 62 per cent of the girls, including the girls who had married by the time the study was made) started work in occupations classified by the census as manufacturing and mechanical, principally as semiskilled factory operatives. A greater variety of work was open to boys than to girls. Nineteen per cent of the boys were in occupations classified under trade or transportation, including 10 per cent of the total number who were drivers or helpers to drivers and 3 per cent who were employed as salesboys. About 16 per cent were in clerical occupations, chiefly in errand and messenger work or as helpers in stock or shipping rooms. Few of the boys, all of whom were city children, did farm work, which is sometimes advised for mentally subnormal boys. Most of the girls who did not enter factories found employment in personal and domestic service, chiefly as servants in private families. Six per cent of the girls were in sales or stock work in stores, and 6 per cent were in errand work or some other clerical work, like bundle or cash work in stores.

TABLE 21.—*Industry and occupation of first and last jobs held by boys and girls formerly attending special classes in seven cities*

Industry and occupation	Boys and girls formerly attending special classes			
	Boys		Girls	
	First job	Last job	First job	Last job
Total	603	603	346	346
Agriculture	24	12	3	2
Extraction of minerals	1	1		
Manufacturing and mechanical industries	330	334	216	219
Learners	9	28	7	2
Laborers	68	57	3	5
Semiskilled operatives	244	208	204	210
Button factories	5	4	9	9
Clothing factories	10	22	43	54
Electrical-supply factories	8	12	4	15
Food industries	19	17	35	25
Lumber and furniture industries	31	20	2	
Metal trades and auto factories	105	87	17	18
Paper-box factories	5	1	20	13
Shoe factories	18	13	10	16
Other industries	43	32	64	60
Others	9	41	2	2

[39] Fourteenth Census of the United States, 1920, vol. 9, Manufactures, pp. 108–111, 1088–1090, 1180–1181, 948–949, 706–708. Washington, 1923.

[40] Among several studies that have been made of the possibilities of employing persons of subnormal mentality in specific occupations are the following: Bigelow, Elizabeth B.: An Experiment to Determine the Possibilities of Subnormal Girls in Factory Work (Mental Hygiene, vol. 5, No. 2 (April, 1921), pp. 302–320); Ordahl, George: Industrial Efficiency of the Moron (Training School Bulletin, February, 1919, pp. 149–153); Unger, Edna W.: Vocational Training for Subnormal Girls; an experiment in the garment-machine-operating trade (Journal of Personnel Research, October, 1926, pp. 243–255); Treat, Catherine: Tests for Garment-Machine Operators (Personnel Journal, June, 1929, pp. 19–28); Burr, Emily: Adjustment of the Feeble-minded in Industry.

TABLE 21.—*Industry and occupation of first and last jobs held by boys and girls formerly attending special classes in seven cities*—Continued

Industry and occupation	Boys and girls formerly attending special classes			
	Boys		Girls	
	First job	Last job	First job	Last job
Transportation	50	101	1	2
Teamsters	13	12	----	----
Motor-truck and taxi drivers	8	55	----	----
Helpers to drivers	8	13	----	----
Telegraph and special-delivery messengers	17	2	1	----
Laborers	3	12	----	1
Others	1	7	----	1
Trade	66	80	29	39
Delivery men (drivers of horse-drawn vehicles)	6	8	----	----
Delivery men (truck drivers)	9	20	----	----
Helpers to drivers	18	8	----	----
Sales boys and girls	8	8	12	21
Stock boys and girls	----	3	8	5
Newsboys	9	6	----	----
Others	16	27	9	13
Public service	5	20	----	----
Soldiers, sailors, and marines	5	17	----	----
Others	----	3	----	----
Professional service	6	9	----	3
Attendants and helpers	5	3	----	3
Others (actors, showmen, etc.)	1	6	----	----
Personal and domestic service	24	27	77	65
Waiters and counter boys and girls	2	3	13	10
Household servants	----	1	47	34
Laundry operatives	3	2	12	10
Others	19	21	5	11
Clerical occupations	97	17	20	16
Messengers, errand and office boys and girls	77	3	5	4
Bundle, cash, and check boys and girls	2	1	8	2
Stock room and shipping room workers	13	9	1	----
Others	5	4	6	10
Occupation not reported	----	2	----	----

The occupations in which the subnormal young persons were employed at the time of the interview, when most of them were at least 20 years of age and had been working from three to seven years, may be assumed to represent more nearly than their first occupations the type of work for which they were fitted. In the first year or so of work more misfits are found than several years later, when some adjustments have been made. The main occupational groups in which the subnormal workers were employed when the study was made or when they were last employed, however, did not differ greatly from those into which they had drifted when they began to work, although the boys, at least, appeared to have a somewhat wider choice of occupations in their last than in their first jobs. A slight trend was noticeable among the boys away from occupations as factory operatives to occupations as learners and to miscellaneous occupations, including laborers and helpers in the building and other

skilled trades. Also a larger number of boys (16 per cent of those in their last jobs compared with 6 per cent of those in their first) were truck or taxi drivers, teamsters, or delivery men, and a larger number were in the Army and Navy and in other occupations classified as public service, an increase that may also be accounted for by the difference in their ages. The number of boys who did clerical work or sales or stock work in stores was about as small in their last as in their first jobs. Less than 1 per cent in their last jobs as compared with 13 per cent in their first jobs were errand or messenger boys, a type of occupation open only to juvenile workers. The proportion of girls in factories and in the other occupational groups was practically the same in their last as in their first jobs except salesgirls (whose number increased from 12 to 21) and household servants (whose number decreased from 47 to 34).

ALL OCCUPATIONS DURING WORK HISTORY

The occupational distribution of all the jobs in which the boys and girls had been employed was about the same as in their last jobs; that is, about the same proportions were in manufacturing and mechanical industries and in occupations grouped under trade and transportation. (Tables 22 and 23.) About three-fifths of the jobs of the boys and girls were in factories or in other mechanical occupations. They were employed in the chief industries of the cities in which they lived—in the metal industries of Detroit and the other cities, in the clothing factories of Cincinnati, Newark, and Rochester, in the shoe industry of Cincinnati and Rochester, in the paper-box, button, and candy factories of Rochester, in the tobacco factories of Newark, Detroit, and Cincinnati, and in the furniture and woodworking establishments of Rochester, Cincinnati, and Detroit. Little variation was found in the proportions of boys employed in factories in the different cities. Not so many girls were employed in factories in Detroit and the California cities as in the other cities, probably owing to the fact that, to judge from census figures for girls under 17 in gainful occupations, less opportunity exists for factory work for girls in Detroit, Los Angeles, and San Francisco.[41] Nearly half the boys' factory jobs were in the automobile and other metal industries. The preponderance of the boys in the automobile and other metal industries is partly due to the fact that more than two-fifths of all the boys included in the study lived in Detroit. Occupations in these industries are no more suitable for persons of subnormal intelligence than occupations in the other industries in which they were found in smaller numbers. In all the manufacturing industries they were employed, as are young workers of unselected mentality, in a great variety of hand and machine operations. (See Tabular Summary A, p. 101.) In the principal industries in which the boys were employed—the metal, clothing, electrical, lumber and furniture, paper-box, and shoe factories and printing establishments—a third of the semiskilled factory occupations were on or in connection with machines.

[41] According to the 1920 census, the number of girls 14, 15, and 16 years of age employed in manufacturing and mechanical industries was 59 per cent in Newark and Rochester, 41 per cent in Cincinnati, 37 per cent in Oakland, 31 per cent in San Francisco and Detroit, and 26 per cent in Los Angeles. Figures computed from the Fourteenth Census of the United States, 1920, vol. 4, Population, pp. 615–664.

TABLE 22.—*Industry and occupation of all jobs held by boys formerly attending special classes in seven specified cities*

Industry and occupation	Jobs held by boys formerly attending special classes											
	All cities		Detroit		Rochester		Newark		Cincinnati		California cities	
	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution
Total boys	4,515	-----	1,915	-----	869	-----	897	-----	494	-----	340	-----
Jobs reported	4,510	100	1,914	100	869	100	895	100	494	100	338	100
Agriculture	153	3	38	2	55	6	9	1	14	3	37	11
Extraction of minerals	9	(1)	3	(1)	5	1	-----	-----	1	(1)	-----	-----
Manufacturing and mechanical industries	2,677	59	1,186	62	528	61	515	58	252	51	196	58
Learners	121	3	48	3	35	4	16	2	7	1	15	4
Laborers and helpers	537	12	225	12	90	10	105	12	52	11	65	19
Semiskilled operatives	1,850	41	820	43	377	43	362	40	185	37	106	31
Button factories	35	1	1	(1)	18	2	15	2	1	(1)	-----	-----
Clothing factories	95	2	17	1	41	5	29	3	8	2	-----	-----
Electrical-supply factories	91	2	40	2	15	2	30	3	6	1	-----	-----
Food industries	157	3	42	2	39	4	34	4	30	6	12	4
Lumber and furniture industries	196	4	92	5	59	7	8	1	30	6	7	2
Metal trades and auto factories	858	19	556	29	57	7	132	15	44	9	69	20
Paper-box factories	25	1	3	(1)	19	2	1	(1)	1	(1)	1	(1)
Shoe factories	111	2	-----	-----	67	8	10	1	33	7	1	(1)
Other industries	282	6	69	4	62	7	103	12	32	6	16	5
Others	169	4	93	5	26	3	32	4	8	2	10	3
Transportation	557	12	235	12	83	10	128	14	72	15	39	12
Teamsters	114	3	38	2	34	4	30	3	12	2	-----	-----
Motor-truck and taxi drivers	194	4	117	6	6	1	36	4	15	3	20	6
Helpers to drivers	73	2	14	1	13	1	40	4	5	1	1	(1)
Telegraph and special-delivery messengers	67	1	13	1	11	1	1	(1)	31	6	11	3
Laborers	75	2	36	2	15	2	17	2	5	1	2	1
Others	34	1	17	1	4	(1)	4	(1)	4	1	5	1
Trade	467	10	198	10	85	10	108	12	55	11	21	6
Delivery men (drivers of horse-drawn vehicles)	56	1	17	1	16	2	22	2	1	(1)	-----	-----
Delivery men (truck drivers)	86	2	50	3	9	1	15	2	6	1	6	2
Helpers to drivers	97	2	34	2	14	2	32	4	15	3	2	1
Sales boys	62	1	30	2	11	1	11	1	10	2	-----	-----
Stock boys	10	(1)	8	(1)	1	(1)	-----	-----	1	(1)	-----	-----
Newsboys	23	1	8	(1)	3	(1)	4	(1)	6	1	2	1
Others	133	3	51	3	31	4	24	3	16	3	11	3
Public service	103	2	34	2	16	2	38	4	11	2	4	1
Soldiers, sailors, marines	77	2	28	1	16	2	24	3	7	1	2	1
Others	26	1	6	(1)	-----	-----	14	2	4	1	2	1
Professional service	46	1	10	1	11	1	14	2	6	1	5	1
Attendants and helpers	25	1	7	(1)	3	(1)	5	1	6	1	4	1
Others (actors, showmen, etc.)	21	(1)	3	(1)	8	1	9	1	-----	-----	1	(1)
Personal and domestic service	177	4	48	3	40	5	47	5	29	6	13	4
Waiters and counter boys	14	(1)	6	(1)	3	(1)	4	(1)	1	(1)	-----	-----
Household servants	3	(1)	-----	-----	-----	-----	2	(1)	1	(1)	-----	-----
Laundry operatives	10	(1)	1	(1)	1	(1)	2	(1)	5	1	1	(1)
Others	150	3	41	2	36	4	39	4	22	4	12	4

[1]Less than 1 per cent.

TABLE 22.—*Industry and occupation of all jobs held by boys formerly attending special classes in seven specified cities*—Continued

Industry and occupation	Jobs held by boys formerly attending special classes											
	All cities		Detroit		Rochester		Newark		Cincinnati		California cities	
	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution
Jobs reported—Continued.												
Clerical occupations	321	7	162	8	46	5	36	4	54	11	23	7
Messengers, errand, and office boys	195	4	71	4	35	4	27	3	42	9	20	6
Bundle, cash, and check boys	7	(1)	3	(1)	3	(1)	----	----	1	(1)	----	----
Stock-room and shipping-room workers	81	2	63	3	6	1	7	1	4	1	1	(1)
Others	38	1	25	1	2	(1)	2	(1)	7	1	2	1
Jobs not reported	5	----	1	----	----	----	2	----	----	----	2	----

[1] Less than 1 per cent.

TABLE 23.—*Industry and occupation of all jobs held by girls formerly attending special classes in seven specified cities*

Industry and occupation	Jobs held by girls formerly attending special classes											
	All cities		Detroit		Rochester		Newark		Cincinnati		California cities	
	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution
Total girls	1,729	----	645	----	538	----	263	----	125	----	158	----
Jobs reported	1,728	100	645	100	538	100	263	100	125	100	157	100
Agriculture	8	(1)	----	----	7	1	----	----	----	----	1	1
Extraction of minerals	1	(1)	1	(1)	----	----	----	----	----	----	----	----
Manufacturing and mechanical industries	1,062	61	276	43	410	76	184	70	102	82	90	57
Learners	17	1	7	1	4	1	1	(1)	----	----	5	3
Semiskilled operatives	1,010	58	259	40	396	74	180	68	97	78	78	50
Button factories	27	2	----	----	21	4	6	2	----	----	----	----
Clothing factories	205	12	18	3	127	24	34	13	20	16	6	4
Electrical-supply factories	62	4	25	4	4	1	25	10	----	----	8	5
Food industries	177	10	36	6	69	13	10	4	28	22	34	22
Lumber and furniture industries	7	(1)	1	(1)	1	(1)	----	----	4	3	1	1
Metal trades and auto factories	86	5	56	9	4	1	20	8	4	3	2	1
Paper-box factories	85	5	13	2	44	8	15	6	7	6	6	4
Shoe factories	74	4	----	----	54	10	9	3	11	9	----	----
Other industries	287	17	110	17	72	13	61	23	23	18	21	13
Sewers, millinery shops	3	(1)	3	(1)	----	----	----	----	----	----	----	----
Others	32	2	7	1	10	2	3	1	5	4	7	4

[1] Less than 1 per cent.

TABLE 23.—*Industry and occupation of all jobs held by girls formerly attending special classes in seven specified cities*—Continued

Industry and occupation	Jobs held by girls formerly attending special classes											
	All cities		Detroit		Rochester		Newark		Cincinnati		California cities	
	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution
Jobs reported—Continued.												
Transportation	7	(1)	2	(1)	3	1	-----	-----	1	1	1	1
Telegraph and special-delivery messengers	3	(1)	-----	-----	3	1	-----	-----	-----	-----	-----	-----
Telephone operators	3	(1)	1	(1)	-----	-----	-----	-----	1	1	1	1
Others	1	(1)	1	(1)	-----	-----	-----	-----	-----	-----	-----	-----
Trade	160	9	116	18	23	4	4	2	3	2	14	9
Salesgirls	88	5	61	9	13	2	4	2	-----	-----	10	6
Stock girls	29	2	19	3	5	1	-----	-----	2	2	3	2
Others	43	2	36	6	5	1	-----	-----	1	1	1	1
Professional service	17	1	5	1	6	1	3	1	-----	-----	3	2
Attendants and helpers	13	1	4	1	6	1	3	1	-----	-----	-----	-----
Others	4	(1)	1	(1)	-----	-----	-----	-----	-----	-----	3	2
Domestic service	391	23	205	32	74	14	62	24	12	10	38	24
Waitresses and counter girls	67	4	50	8	7	1	3	1	1	1	6	4
Household servants	184	11	79	12	45	8	38	14	6	5	16	10
Laundry operatives	84	5	41	6	15	3	8	3	5	4	15	10
Others	56	3	35	5	7	1	13	5	-----	-----	1	1
Clerical service	82	5	40	6	15	3	10	4	7	6	10	6
Messenger and errand girls	19	1	4	1	6	1	3	1	-----	-----	6	4
Bundle, cash, and check girls	25	1	16	2	2	(1)	2	1	4	3	1	1
Shipping and stock room workers	4	(1)	2	(1)	2	(1)	-----	-----	-----	-----	-----	-----
Typists	6	(1)	-----	-----	1	(1)	2	1	-----	-----	3	2
Others	28	2	18	3	4	1	3	1	3	2	-----	-----
Jobs not reported	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	1	1

[1] Less than 1 per cent.

That boys of inferior mentality are sometimes employed as carpenters, painters, and in other skilled trades was noted in a study of patients who had been discharged from the Waverly institution for the feeble-minded.[42] Relatively few of the boys in this study, however, were in occupations of this nature, perhaps because the boys from the special classes were somewhat younger than those in the Waverly study. Only 3 per cent of the boys' jobs were as learners in the skilled trades. Some of the boys, most of them 20 years of age or over at the time of the study, had been earning the wages of skilled mechanics in their last jobs; two were carpenters and a few were employed in occupations such as welding, toolmaking, and topbuilding

[42] Fernald, Walter E., M. D.: Aftercare Study of the Patients Discharged from Waverly for a Period of Twenty-five Years, p. 6. Reprinted from Ungraded, vol. 5, No. 2 (November, 1919).

and trimming in the upholstery trade. (See cases 31, 33–35, pp. 58 to 60, illustrating wages in skilled trades.)

More than three-fifths of the boys' jobs in trade and transportation were as drivers or helpers to drivers; others were as newsboys, peddlers, and general helpers in stores or markets. Boys from 14 to 20 helped on trucks and wagons; the drivers were sometimes as young as 16. Clerical occupations, other than errand work, consisted chiefly of stock and shipping room work. Boys in personal and domestic service were janitors and porters, dishwashers, elevator boys, bootblacks, and pinboys in bowling alleys. A few boys had been public performers, boxers, and drummer boys in bands; a number had been theater ushers and doormen. After they were 16 or 17 years of age some had enlisted in the Army, the Navy, or the Marines.

The practicability of employing girls of subnormal intelligence in factory work has been demonstrated in several other studies. (See footnote 40, p. 35.) Operating power machines used in the garment trades, according to a study made by the New York Vocational Adjustment Bureau, was found to be suitable work for some girls whose intelligence quotients, like those of the girls in the present inquiry, ranged from 40 to 70. Three-fifths of the jobs of the girls included in this study were in the various manufacturing industries of the different cities. (Table 25.) The largest number were in clothing factories and the next largest in the various food industries, such as candy factories and canneries. Like girls of unselected mentality, these girls were employed in innumerable hand operations in factories and also in machine work. (See Tabular Summary B, p. 103.) Thirty-three per cent of their jobs in button, chemical, clothing, metal, paper-box, shoe, furniture, and printing establishments were in connection with machinery, the most important numerically being machines in the clothing trades.

Occupations in personal and domestic service were, after factory occupations, the most important numerically for girls. Most of them were as maids in private families, doing general housework or caring for children, but others were in steam laundries and in restaurants, or as elevator girls, dishwashers in hotels, and hospital employees. Only 7 per cent of the girls' jobs were in sales or stock work in stores, and only 5 per cent were in any kind of work classified as clerical—usually bundle and cash work in stores and stock work in factories. The number of girls who had been employed as file clerks, cashiers, timekeepers, typists, or telephone operators was negligible; no girl had tried stenography or bookkeeping. A few girls had been theater ushers, three had been chorus girls, and one a dancer.

In a study made by the vocational-education department of the University of Michigan of subnormal girls who had formerly been pupils in the special classes of Detroit public schools,[43] housework, lunchroom, and other jobs in personal and domestic service, and work in stores were found to be more common than among the subnormal girls in the present study whose homes were also in Detroit.

The young workers of subnormal intelligence in the different cities were employed in factory and other mechanical occupations to a greater extent, and in clerical occupations to a lesser extent, than

[43] Carpenter, Mary S.: A Study of the Occupations of 207 Subnormal Girls after Leaving School. Vocational Education Department, University of Michigan, Special Studies No. 2 (June, 1925).

children of 14, 15, and 16 years of age of unselected mentality whose occupations were reported in the 1920 census. In each of the three cities in which the number of former special-class pupils is large enough for comparison, relatively more of the special-class pupils had entered factories as semiskilled operatives or laborers than of all children between 14 and 17 years employed in the same cities, and correspondingly fewer than of other children were employed in clerical work. The difference in the occupational distribution of girls from the special classes and girls as a whole was more marked than for the boys. The proportion of special-class girls doing clerical work in their first jobs was 3 per cent in Rochester, 4 per cent in Newark, and 8 per cent in Detroit; from 26 per cent to 32 per cent of all girl workers in the three cities were in clerical occupations. As compared with about 3 per cent of the special-class boys in each city who did any kind of clerical work (except messenger work, which is classified as clerical), from 11 per cent of the Rochester boys to 17 per cent of the Detroit boys were in clerical occupations other than messenger work.[44]

Similar differences in the occupational distribution of unselected and subnormal children were found in Newark, where the Children's Bureau made a study of the employment of children under 16 who attended continuation school. A considerably smaller proportion of these children entered factories and a larger proportion entered clerical or sales work than of the children of subnormal mentality who lived in Newark.[45] In their last jobs a much smaller proportion of the boys of subnormal mentality in the seven cities, most of whom were 20 years and over at the time of the study, were employed in sales, stock, or clerical work of some kind (excluding messenger work) than the proportion of boys of unselected mentality between the ages of 16 and 18 years included in a study which the Children's Bureau made of employed young workers in Milwaukee.[46] About the same proportions of the Milwaukee girls and of the subnormal girls were employed as factory operatives in their last jobs; but the majority of the Milwaukee girls not in factories were in clerical or sales work, whereas the majority of the subnormal girls not in factories were in personal and domestic service.

According to tabulations made in 1923 and 1924 by the Cincinnati Vocation Bureau of occupations of minors 16 and 17 years of age to whom regular and retarded employment certificates were issued, the occupations of the normal and the retarded group differed markedly.[47] A much larger proportion of the normal than of the retarded boys (48 per cent and 27 per cent, respectively) went into clerical and sales work. An even greater difference was found in the type of occupations entered by the normal and the retarded girls.[48]

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[44] Fourteenth Census of the United States, 1920, vol. 4, Population, Occupations. Figures compiled from pp. 621–622, 648–649, 659.

[45] The Working Children of Newark and Paterson, p. 16.

[46] Unpublished figures.

[47] According to a law passed in Ohio in 1921, after most of the minors in the present study had left school, "retarded" certificates might be issued to children who were mentally incapable of meeting the requirements for regular certificates if they were able to meet the other legal requirements. (Laws of 1921, pp. 376, 384.)

[48] Vocational Guidance and Junior Placement, pp. 199–200. U. S. Children's Bureau Publication No. 149. Washington, 1925.

INTELLIGENCE LEVELS AND OCCUPATIONS

A relationship between mental ability as measured by various tests and kind of work performed has been brought out in various studies.[49] A correlation between intelligence and success in learning certain trades has also been found.[50] In the study of Cincinnati children it was concluded that "unskilled labor in some form" was the only field of work open to those who had completed only the fifth or sixth grade in school.[51]

The young workers of relatively inferior mentality, both boys and girls, were more restricted in their choice of occupations than those of greater mental capacity.[52] (See Appendix, Tables I and II.) A larger proportion of the jobs of boys whose intelligence quotients were under 50 than of those whose intelligence quotients were 70 or more (66 per cent and 48 per cent, respectively) were found to be as laborers or semiskilled operatives in manufacturing and mechanical industries. Most of the occupations of the girls whose intelligence quotients were less than 50 were in factory work and domestic service. Only 17 of 96 boys with intelligence quotients under 50, compared with slightly more than one-fourth of the boys with higher intelligence quotients, had had jobs in connection with power machines in the principal manufacturing and mechanical industries. Approximately the same proportions of girls with intelligence quotients of less than 60 and of 60 and more had been employed on power machines. Employment in sales or stock work in stores or in clerical work other than errands was generally confined to boys and girls whose intelligence quotients were at least 60. Relatively fewer of the boys with intelligence quotients of less than 60 than of those with higher intelligence quotients had been truck or taxi drivers; only one boy whose intelligence quotient was less than 50 had been employed to drive a motor vehicle, and he had lost his job in less than two months, being arrested and fined for reckless driving. (For the intelligence quotients and occupations of boys and girls who earned relatively high wages in their last jobs, see Appendix, pp. 101–103.)

TRAINING REQUIRED FOR OCCUPATION

The work done by the subnormal workers required little education or training. Their employers were questioned regarding the academic training needed for each job and the amount of time required to learn it. The majority of both boys and girls had reached only an academic equivalent in the special class of the third or fourth grade, and only a small proportion had attained the fifth or a higher grade. According to the employers who were interviewed, however, education beyond the fourth grade was needed for only 5 per cent of the jobs, chiefly those in the telegraph and special-delivery messenger service, clerical

[49] Psychological Examining in the United States Army, edited by Robert M. Yerkes (Memoirs of the National Academy of Sciences, vol. 15, pp. 819–837, Washington, 1921); Fryer, Douglas: Occupational Intelligence Standards (School and Society, vol. 16 (September, 1922), pp. 273–277); Toops, H. A., and Rudolph Pintner: Educational Differences among Tradesmen (Journal of Applied Psychology, March, 1919, pp. 33–49).

[50] Cowdery, Karl M.: Measures of General Intelligence as Indices of Success in Trade Learning (Journal of Applied Psychology, vol. 6, No. 4 (December, 1922), p. 311).

[51] An Experimental Study of Children, p. 663.

[52] A list of factory occupations in which girls of different levels of intelligence have been successfully placed is found on pp. 10 and 11 of Dr. Emily Burr's article entitled "Adjustment of the Feeble-Minded in Industry."

work other than errands, selling occupations, and apprenticeships and other work in skilled trades. To judge from their first and last occupations, few of the boys and girls employed in these occupations, except those who were learning a trade, had failed to attain an academic grade equivalent to at least the fourth grade.

Only a short time (from a few days to a few weeks) was required to learn most of the occupations in which the boys and girls found employment. A learning period of more than one month was needed for only 7 per cent of the jobs about which employers gave their opinions. The outstanding occupations among these were the skilled trades, certain factory operations, selling occupations, and occupations such as actors, boxers, and other public performers, classified by the census as professional.

Probably the habits of work that the boys and girls may have acquired while in the special classes (see p. 6) helped them to adjust themselves to their jobs even if the kind of work they did in school, such as woodworking and weaving, was quite different from that in which they were afterwards employed. Only 7 of the 59 Rochester prevocational-school boys who had been trained in printing, woodwork, or cobbling entered occupations for which they had been trained. (See cases 29 and 30 on p. 51.) One Rochester girl who had learned machine stitching at continuation school was employed for about five months in a clothing factory in various stitching operations, and she said that this training had helped her get the position.

DURATION OF WORK IN ALL OCCUPATIONS

If the length of time an individual stays in an occupation may be taken as an indication of his success in that work, it would appear that many of these subnormal young persons did not find employment in occupations for which they were fitted when they started work. The duration of their first positions was very short, in many cases less than three months. (See p. 21.) The length of time these young workers remained in the first occupation in which they were employed was but little shorter than the time spent in their first positions, as only a small proportion (7 per cent of the boys and 11 per cent of the girls) changed from one occupation to another while working for the same employer.

It might be expected that the subnormal boys and girls would keep their second and third and successive occupations longer than their first. A large proportion of all the jobs that they had had to the date of the study, however, were of short duration. Three-fourths of the terminated jobs that the boys had held ended in less than six months, and more than one-half lasted less than three months. (Table 24.) The duration of the girls' jobs was about the same as that of the boys. That many children of unselected as well as of subnormal intelligence keep their first positions for very short periods has already been shown (see p. 21), but no figures are available to show whether or not children as a whole keep their subsequent positions longer than these subnormal young workers.

TABLE 24.—*Duration of all terminated jobs held by boys and girls formerly attending special classes in seven cities*

Duration of all terminated jobs	Terminated jobs held by boys and girls formerly attending special classes			
	Boys		Girls	
	Number	Per cent distribution	Number	Per cent distribution
Total	4,090		1,580	
Duration reported	3,988	100	1,538	100
Less than 1 month	1,164	29	445	29
1 month, less than 3	1,078	27	421	27
3 months, less than 6	769	19	258	17
6 months, less than 1 year	516	13	215	14
1 year, less than 2	314	8	137	9
2 years, less than 3	101	3	40	3
3 years and more	46	1	22	1
Duration not reported	102		42	

When the mentally deficient workers did manage to find work that they could do, however, they held on to it for long periods; the majority, both those of the upper and those of the lower intelligence levels, had been employed in at least one occupation in their work history for a considerable period of time. Employment in the same kind of work for one to three years at some time during their work history for the boys and girls of different levels of intelligence was a common experience. (See cases 13–15, pp. 46, 47, and 18–22, pp. 48–49.) At the time of the study 35 per cent of the boys and 45 per cent of the girls had been employed in the same job in which they were then employed for one year or longer. (Table 25.)

TABLE 25.—*Length of time employed in job held at date of interview by boys and girls formerly attending special classes in seven cities*

Length of time employed in job held at date of interview	Boys and girls formerly attending special classes			
	Boys		Girls	
	Number	Per cent distribution	Number	Per cent distribution
Total	603		346	
Employed at date of interview	425		149	
Length of time reported	419	100	147	100
Less than 1 month	68	16	10	7
1 month, less than 3	69	16	30	20
3 months, less than 6	57	14	21	14
6 months, less than 1 year	78	19	20	14
1 year, less than 2	73	17	32	22
2 years, less than 3	32	8	12	8
3 years and more	42	10	22	15
Length of time not reported	6		2	
Not employed at date of interview	178		197	

Among the boys little difference was found in the duration of employment in the different kinds of occupations. Among the girls, however, some relation appeared to exist between the kind of work they did and the duration of their jobs. For example, 25 per cent of their jobs in factories, compared with 35 per cent of those in personal and domestic service and 40 per cent of those in saleswork, lasted less than a month.

CASES ILLUSTRATING OCCUPATIONS

The following 17 cases illustrate the occupations of the subnormal workers. They show the relation between occupation and intelligence and other characteristics and the need of these boys and girls for vocational guidance. Cases 13 to 16 are examples of occupations of boys and girls with intelligence quotients of less than 50. The first three are examples of individuals who had found work that they could do in spite of some peculiarities of temperament in addition to mental inferiority; the fourth is an example of a boy who was apparently unemployable.

Cases 17 to 24 illustrate occupations in which individuals with intelligence quotients of 50 or more had been employed for long periods at a time. In case 23 a girl with an intelligence quotient of 72 was doing clerical work at the time of the inquiry and had been employed for two years as a typist.

Cases 25 to 30 show the need for special training and placement in occupations suitable for persons of defective mentality. Cases 25 to 28 illustrate the experience of boys who suffered from the wrong kind of advice or from none at all; cases 29 and 30 show the work experience of two boys who took advantage of their training in the Rochester Prevocational School, one of them having been assisted by the school in getting employment in work in which he had been trained.

Case 13 (*Newark*).—Norman, a boy of very inferior mentality, whose intelligence quotient was not definitely ascertained but was less than 50 (Goddard revision) and who was said by one of his teachers to be "too low grade to test," was employed for long periods at a time in two simple factory operations. He had accomplished little in school; he had done nothing at all along academic lines and only poor work in manual training. According to his special-class teacher, he was large and strong physically, was inclined to be moody and sullen, and was deaf and talked scarcely at all. In spite of these handicaps he succeeded when 14 years of age in finding, through a friend, a job with a can-manufacturing company, which he kept for more than nine months. His work consisted merely of putting cardboard caps in the covers, an extremely simple operation, which he could do satisfactorily. But the tin blistered his hands, and he gave up his job and was out of work for a number of months. Again through a friend, he found a job in a wire factory putting rubber insulation on wires. The job involved a machine process but was so simple that he was able to learn it in a week, about the usual time required for learning it. He had been working at this job for three years and four months. His employer said that the only necessary qualification for the work was patience and that he was a steady worker and very satisfactory. A normally alert person would probably have tired quickly of so monotonous a job.

Case 14 (*Newark*).—Otto had an intelligence quotient of 38 (Goddard revision) according to the last test given him before he left school, but one of 47 (Goddard revision) according to a test given him a year earlier. He had been employed successfully in several different kinds of occupations in factories and in the Army. He had done only an equivalent of first-grade work in regular school and had been nine years in the special class, having been placed there almost immediately on entering school. His teachers said that he was lazy, stubborn, and excitable, with a violent temper. Yet in his first five years out of school not one of his five employers had had any fault to find with him. On leaving school at 16 years of age he helped in his stepfather's saloon for four months. He then

obtained work in a candy factory as helper on a candy-cutting machine. He stayed in this occupation for nearly two years, leaving because he wanted better wages. His employer was satisfied with his work and twice reemployed him for periods of several months at a time. On leaving the candy factory the first time, he enlisted in the Army where he remained about seven months, receiving an honorable discharge. He had also helped on a truck for a few weeks and had worked for a wire-manufacturing company, helping on a machine. The exact nature of this work was not learned, but his employer described him as "fast, careful, willing, and quiet" and said he would rehire him. At the time of the study he was operating a lathe in a furnace-manufacturing company at $25 a week, an occupation that he had had for two months.

Case 15 (*Newark*).—Rose, a girl with an intelligence quotient of 44 (Goddard revision), apparently succeeded in finding work that she could do because of the close supervision which a forewoman in a factory gave her. In school she had never been able to do any academic work and so had been kept in the manual-training classes, in which she learned a little about sewing and laundry work. Her teachers reported that she was emotional and excitable and unable to concentrate long on any given task, that laundry work was the only thing she could do, and that she responded quickly to kindness. They recommended that she do housework under close supervision. On leaving school at 16 years of age, however, the girl first attempted work as wrapper in a candy factory. How she obtained the job was not learned; she left the first day because she "didn't get along with the boss." She was more fortunate in her second job, which she obtained through an advertisement. Here she aroused the interest of a forewoman, who obtained the employer's cooperation in giving the girl work that she could do, such as running ribbons in underwear, putting marks on articles, and running errands. The forewoman not only supervised her work but looked after her during the lunch hour. Rose had been in this position for 3½ years at the time of the interview and was earning $10 a week. The superintendent said the girl was a steady worker but had no ability. He was keeping her because she was a "charity case."

Case 16 (*San Francisco*).—John, a boy of very inferior mentality, had personality traits that made him difficult to deal with. According to one test (Goddard revision) given him several years before he left school his intelligence quotient was 37, and according to another given him about the same time it was 46. In school he had been considered stubborn, moody, and possessed of a violent temper. He had tried several different occupations but had not succeeded in keeping any of them for more than a few weeks, being unemployed most of the time. He had helped in his father's grocery store at times but had never received any wages for this work. Soon after leaving school he tried helping on a milk wagon but left after a week's trial. Soon after this he had a job in a bleachery, but inside of two weeks burned his hands in the lime and left. The next year he worked a week for a basket maker, having acquired some knowledge of the work in his special-class course. His employer accused him of stealing and discharged him within a week. A few months later he obtained a job as laborer in a coal yard, filling sacks and loading wagons. His employer, when interviewed by the Children's Bureau agent, said that the boy was a hard worker if one knew how to get along with him. "He liked to be around horses, and that kept him satisfied." After five weeks, however, his employer discharged him because, after his parents had insisted on taking all his wages, he would not work.

John had been out of work about three years at the time of the study. In this time he had been helping his parents in the store, running errands, chopping wood, and doing other chores but not waiting on customers. His mother said employers had no patience with him, and she thought it best to keep him at home where she could look after him.

Case 17 (*San Francisco*).—Dan, a boy whose intelligence quotient was 54 according to a test (Goddard revision) given him several years before he left school, had been a planer's helper in a box factory. He was a strong, fine-looking boy of athletic build, and was very particular not only about his personal appearance but about everything he did. His handwork in school had been rated as excellent, though he had been unable to pass even the first grade in his other studies. He was 17 when he left school and applied for a job at the box factory. His employer said that he was perfectly satisfactory as planer's helper but that he was not qualified for a higher-grade job.

Case 18 (*Newark*).—Victor, a boy of Italian parentage, with an intelligence quotient of 43 (Goddard revision), also had had but one occupation, that of helper in a hat factory, carrying, sorting, and hanging hats. He had worked in the hat factory for four years, beginning at the age of 16. Although out of work occasionally on account of the seasonal nature of the industry he always returned to the same employer to do the same kind of work and was still employed at the time of the study, earning only $12 a week. Victor had accomplished scarcely anything in school. He had not finished first-grade work in regular-school subjects, and his handwork was poor. He had been out of school only a few months when he found employment, through the efforts of a friend who worked there, in the hat factory.

Case 19 (*Rochester*).—Fred had worked for long periods at a time in shoe factories. His intelligence quotient was 57, and he had reached only the second grade in regular-school subjects but had done good work in industrial subjects. In school he was "a faithful and untiring worker," according to his teachers. When he left school at the age of 16, he first found work feeding a dipping machine in a candy factory. After six weeks he left this place to take a better-paying job in a metal-manufacturing concern. Here he was employed for seven weeks as a brushing-machine helper in the plating department but was unsuccessful, his employer saying that he was "lazy and stupid and could not be taught." Almost immediately, however, he found work in a shoe factory cleaning the linings of shoes by hand. He remained at this task for two years and was a satisfactory employee. When laid off during a slack period, he applied for work at another shoe factory and was employed as a trimmer of insoles. He had been working at this job for more than three years at the time of the interview, and although he was slow and unable to earn much on piecework (about $12 a week) he was able to keep his job.

Case 20 (*Rochester*).—Henry had been employed to sort and bale rags for different junk dealers since he left school at the age of 15. His intelligence quotient was 57 (Goddard revision), and he was further handicapped by a speech defect and poor muscular control. Although he had done fourth-grade work in regular-school subjects he was poor in handwork, having been in the second grade in industrial subjects. He was, however, an obedient boy of a cheerful disposition. His father, of Russian-Jewish nationality, was a junk dealer and had helped him get work. The boy had stayed with one junk dealer for two years and at the time of the study had been almost three years with another junk dealer.

Case 21 (*Newark*).—Catharine, a girl whose intelligence quotient was 61 (Goddard revision), had found work in a shoe factory in which she was successfully employed. She had done fourth-grade work in regular-school subjects and seventh-grade work in handwork. She was 15 years of age when she left school. Her teachers said that she had an unfortunate disposition, being stubborn, irritable, moody, and untruthful. They thought that she was best fitted for housework. Catharine, however, through a friend who worked there, first obtained work in a shoe factory as packer. She stayed in this factory about six months, leaving because she was needed at home. After nearly a year at home, she obtained employment in a clothing factory cutting threads. After a month in this position, she again found work in a shoe factory. She performed several different hand operations in three shoe factories, taping and labeling in the fitting room and fitting linings to the insides of shoes. Except for a three months' lay-off due to a slack season, during which she obtained temporary work in another factory, she had continued in this last occupation for more than two years and was still employed at the time of the interview. Her employer remarked that she did good work and that he did not want to lose her.

Case 22 (*Newark*).—Dora, another girl whose intelligence quotient was 61 (Goddard revision), had spent most of her industrial life in machine work in a paper-box factory. Her teachers said that she was a sensitive, emotional type of girl but had the ability to concentrate on her work. She had done good work in her manual-training courses but only second-grade work in her other studies. Her mother was a widow, and Dora left school before her fourteenth birthday at the close of the school year to go to work. She obtained employment almost at once in a clothing factory, snipping threads off finished garments at $6 a week. She did this work but a few weeks, however, and then found work in a paper-box factory as a stripper, operating the machine that feeds the glue and covers the

sides of boxes. She did the same kind of work for more than four years, when she had to give up working for six months on account of ill health. When she was able to work, she returned to the same job and was still employed in it at the time of the study, earning $18 a week. Her employer said that she was one of his oldest and best workers.

Case 23 (*Newark*).—Roland, with an intelligence quotient of 63 (Goddard revision), helped his father, a stonecutter by trade. Although the boy was characterized by his special-class teachers as irritable, stubborn, lazy, unable to settle down to anything, sex offender, and delinquent, the mental examiner declared that in spite of his intellectual inferiority he was in certain ways alert, energetic, and active, but in a haphazard fashion. He was rated as poor in handwork in school, his teacher reporting that he would not "settle down to any kind of work." He stayed in school until he was nearly 16 years of age. His father then took him into his business and taught him how to shape-out rough stones for monuments and to chisel letters after the design had been drawn. He had worked at this for 4½ years at the time of the survey. His father was pleased with his work, saying that he was very accurate and could cut 120 letters a day, and that the work he did was worth $50 a week. However, he gave the boy only spending money and not regular wages.

Case 24 (*Newark*).—Grace's mental ability was superior to that of the majority of special-class girls, her intelligence quotient being 72. At the age of 13 she had reached only the fourth grade in school and was transferred to a special class, in which she remained more than two years. She had many unfavorable character traits; her teacher said she was stubborn, quarrelsome, and irritable. She was emotional, and her attention was easily distracted. In appearance she was unclean and slovenly. However, she did good manual work. She was one of the few girls in the study to attempt clerical and store work, but she had also worked in factories.

She went to work at 16. In the following five years she was employed about three-fourths of the time, at least part of her unemployment being due to the fact that she was needed at home. Her first position was as a packer with a manufacturer of surgical dressings. After nine months she lost this position because the firm went out of business. She next obtained work as salesgirl in a small retail dry goods store. Here she worked only two months, leaving because a teacher from the special class came to the store and the girl was afraid her employers would discover that she had been in a class for defectives in school. She next found work in a commercial laboratory as typist. She remained here for a year and four months, the longest time she ever remained in any position. After several months at factory work, she returned to the same commercial laboratory as typist, staying this time for eight months. Why she left and what her employer thought of her work could not be learned. After a period of unemployment she obtained a position as packer of samples in a manufacturing company; she kept this about two months. She was then employed at machine work, straightening wires in a horn-manufacturing company. She left this position after two months because, according to the employer, she did not get on with the other girls. At the time of the study she was doing clerical work. She was earning only $14 a week but had earned $17 a week during the two years of her typing experience.

Case 25 (*Newark*).—Robert, with an intelligence quotient of 76 (Goddard revision), had tried unsuccessfully to learn a trade. He had done only third-grade work in his academic studies but sixth-grade work in manual training. His teachers said that he was an obedient, truthful boy of good personal appearance, and able to concentrate on his work. When he first left school at 14 years of age, he found a job as bus boy in a restaurant. He did this work satisfactorily, remaining with his employer nine months. He also worked a few weeks as assembler in a toy factory. After he had been out of work for some time, he answered an advertisement for an apprentice engraver in a small engraving company. The firm drew up a contract with the boy's mother agreeing to teach him the trade in three years and to pay him such wages as he earned. After three months Robert's employer called his mother in and told her that it was a waste of time for her son to stay as he had made no progress in the trade up to that time. The employer said that the boy was honest and willing, and would be satisfactory at unskilled work. Unconvinced that her son could not become an engraver the mother tried persistently to locate him in a jeweler's shop. In the next two

years he was tried out in three different places. He was laid off from the first of these after two months. He managed to hold his next job for a year and then was discharged. His employer remarked that he was willing to work and a good boy, but that he could not be taught to be a ring engraver. In the year he was there he had been able to learn nothing beyond the simplest processes. Rather than take another kind of job, however, he loafed, as on previous occasions, for several months until he was able to obtain another position as engraver, this time on watch cases. He had been employed in this position for four months at the time of the study, not long enough to judge as to whether or not he could continue to hold it. Obviously, however, the boy needed other vocational advice than that which his mother was able to give him.

Case 26 (*Oakland*).—Hugh was another boy whose experience illustrates the need of vocational advice for special-class boys. He had an intelligence quotient of 74. He wished to learn the plumber's trade and for 3½ years, almost all the time between the date he left school and the date of the study, he had worked as apprentice to a plumber, a position that he had found through the help of a friend. Hugh was large and strong and besides having relatively good mental capacity for a special-class boy was well spoken of by his teachers. He had done the equivalent of fifth-grade work in regular-school subjects, had done good work in carpentry and basketry, was "able to mend anything," and had some powers of concentration. In spite of these points in his favor two weeks before the date of the study his employer told him that he could keep him no longer and that he should look for another kind of work because he could never qualify as a first-class plumber. When the employer was visited by the Children's Bureau agent he said that Hugh did not have the mental caliber for an independent plumber, that though he was trustworthy and a good worker, he was very slow and needed constant direction. At the time he was interviewed, Hugh had been unable to get any other kind of work.

Case 27 (*Rochester*).—Tony had done fourth-grade work in a parochial school before he entered the special class. When assigned to the special class, he had an intelligence quotient of 55 (Goddard revision). The mental examiner said he was capable of self-support if employed under supervision. After he left the special class at the age of 15, he got along very well so long as he worked under the supervision of his father, an Italian who kept a fruit store, helping in the store in the winter and peddling bananas from a wagon in the summer. His father gave him only small wages, however, and at the age of 20 Tony had married and needed money. Through the efforts of a social agency and a police officer who did not understand Tony's limitations a loan was raised to set him up in business. Tony chose the site of his new store and bought his stock, but within two weeks he showed himself totally incapable of managing his stand. He would not open up until late in the morning and would often stay away all the afternoon. The officer took charge of the shop one day and demonstrated that it could be run on a profitable basis. Tony, however, lost money in all his transactions by unwise buying and selling. At the end of the third week he closed up his business with a debt of $175.

Case 28 (*Rochester*).—Morris had an intelligence quotient of 78 (Goddard revision), but he had other handicaps. His experience illustrates the need for assistance in getting the right kind of work. He was a shy boy, so sensitive over his lack of ability to read and write well that he was afraid to apply for work at the larger factories where he would have to fill out application blanks. He was almost blind in one eye and had done only fair work in furniture assembling in prevocational school. He had been brought to court for automobile stealing before leaving school and had been placed on probation. In the first year after leaving school at the age of 16, he picked up any job he could through a public employment bureau, but he was so slow in learning even the simple processes required of him that he became discouraged and quit his first three jobs in less than three weeks. He tried wrapping in a bakery, gluing and doweling in a furniture factory, and cleaning the nuts from which buttons are made in a button factory. At length, 10 months after he left school, a friend found him a position in a typewriter-supply factory, his job being to wrap typewriter ribbons in tin foil and place them in a box. The superintendent of the factory said that Morris was very slow in learning the work, but having once acquired the ability to do this simple process, he worked on very steadily. For three years he was content; then the question of a raise came up, but as he was receiving the maximum for his job and

as he was incapable of doing any higher-grade work, the raise was refused. Morris left and for six months was without a job of any kind. Finally a friend employed in a pretzel bakery helped him get a position there as pretzel twister. Although at this work only a month at the time the employer was interviewed, he was said to be doing well.

Case 29 (Rochester).—The special training that Ferdinand, whose intelligence quotient was 71 (Goddard revision), received while in the Rochester prevocational school apparently helped him to succeed later. He had done only second-grade work in the usual school subjects but seventh-grade work in prevocational school, having been in the cabinetmaking department for nearly two years. Here he had received instruction on various woodworking machines. The first winter after leaving school he continued working part time as helper on a milk wagon, as he had done during his last year in school. The following summer, however, through the efforts of his friends, he obtained work in a chair factory. He worked in the assembling department for seven months; he left because the factory was too far from home. With his father's help he obtained employment in another woodworking factory at the same wage, $15 a week, that he had had in his other job. For 1½ years he was employed "taking off from the saws," and he was then promoted to operator of the ripsaw machine. After another 1½ years at this job, he was transferred to the sanding machine as operator. At the time of the interview he had been employed in this occupation for six months.

Case 30 (Rochester).—George was one of the few boys in the study who obtained work with the help of his school. According to several tests given him (Goddard revision), his intelligence quotient varied from 65 to 73. He was a prevocational-school boy and had had training for 1½ years in woodworking and cabinetmaking and was a conscientious worker. In regular-school subjects he had reached only the third grade. When he was ready to leave school at the age of 16, his school principal placed him with a furniture-manufacturing company. George stayed here for nearly three years. He worked for more than a month taking away from the planing machine; he was then promoted to operator of the boring machine, a job that he kept for six weeks. At the end of this time he was transferred to another occupation. In the next two years he operated four kinds of sanding machines. He was considered a satisfactory worker. Exactly why he left this job is not known. His employer said he asked for a raise in wages and when this was refused he left; the boy said the sawdust made him ill. At all events he next found work as helper in a chemical-products factory, in which he had been employed steadily for two years at the time of the inquiry.

WAGES

FIRST AND LAST WAGES

The wages received by the young workers varied considerably from city to city. The median cash wage received on beginning work ranged from $9.50 a week for Cincinnati boys to $17.50 for Detroit boys, and from $9 for Cincinnati girls to $12 for Detroit and Rochester girls. (Table 26.) A few young persons in each city earned less than $4 a week, and a number (19 per cent of the boys and 2 per cent of the girls) $20 and more. Most of the boys (79 of 99) who earned the relatively large amount of $20 or more a week lived in Detroit. In addition to the workers who received only cash wages a small proportion (10 per cent of the boys and 16 per cent of the girls) received some form of maintenance, meals, lodging, or clothing in place of or in addition to money wages. (Table 27.) Half of the boys (34 of 62) who received maintenance were employed by their relatives in such jobs as helpers in stores or on trucks or wagons. Two children received no wages; one was an usher in a motion-picture theater and got "presents," the other was a learner in a beauty shop.

TABLE 26.—*Median wage received for first and last job by boys and girls formerly attending special classes in specified cities who received cash wage only and reported the amount*

City	Boys and girls formerly attending special classes							
	Boys				Girls			
	First job		Last job		First job		Last job	
	Total receiving cash wage only and reporting amount	Median [1]	Total receiving cash wage only and reporting amount	Median [1]	Total receiving cash wage only and reporting amount	Median [1]	Total receiving cash wage only and reporting amount	Median [1]
All cities	514	$13.50	524	$24.00	284	$11.50	303	$15.00
Detroit	221	17.50	230	27.00	104	12.00	116	15.50
Rochester	97	12.00	98	22.00	89	12.00	93	15.50
Newark	102	10.00	101	21.00	42	10.00	43	13.50
Cincinnati	52	9.50	49	19.00	21	9.00	21	12.50
California cities	42	12.50	46	19.50	28	12.00	30	16.50

[1] Medians are shown to the nearest 50 cents.

TABLE 27.—*Initial wage and intelligence quotient of boys and girls formerly attending special classes in seven cities*

Initial wage and sex	Young persons formerly attending special classes						
	Total		Intelligence quotient				Not reported
	Number	Per cent distribution	Less than 50	50, less than 60	60, less than 70	70 and more	
Boys	603		31	157	246	154	15
Receiving cash wages only	539		28	140	216	141	14
Amount reported	514	100	26	134	203	137	14
Less than $4	17	3	3	5	7	2	
$4, less than $6	23	4	2	7	7	6	1
$6, less than $8	43	8	3	9	14	12	5
$8, less than $10	65	13	4	18	26	15	2
$10, less than $12	60	12	2	11	26	19	2
$12, less than $14	77	15	2	24	28	21	2
$14, less than $16	60	12	3	15	21	20	1
$16, less than $18	30	6	1	8	13	8	
$18, less than $20	40	8	1	11	18	9	1
$20 and more	99	19	5	26	43	25	
Amount not reported	25		2	6	13	4	
Cash and other compensation	41			12	23	6	
Other compensation only	21		2	5	7	6	1
No wages	1		1				
Not reported as to wages	1					1	
Girls	346		40	109	133	59	5
Receiving cash wages only	288		31	95	109	49	4
Amount reported	284	100	31	93	108	48	4
Less than $4	4	1		3	1		
$4, less than $6	15	5	3	3	6	2	1
$6, less than $8	39	14	6	15	14	4	
$8, less than $10	41	14	1	14	20	5	1
$10, less than $12	59	21	7	20	19	12	1
$12, less than $14	73	26	7	23	27	15	1
$14, less than $16	26	9	2	7	11	6	
$16, less than $18	14	5	1	4	6	3	
$18, less than $20	7	2	1	3	3		
$20 and more	6	2	3	1	1	1	
Amount not reported	4			2	1	1	
Cash and other compensation	53		8	14	20	10	1
Other compensation only	2				2		
No wages	1				1		
Not reported as to wages	2		1		1		

It has generally been found in studies of young workers of unselected mentality that the initial wages of boys are higher than those of girls.[53] The wages of the boys of subnormal intelligence, however, were but little higher than those of the girls except in Detroit, where the boys' wages greatly exceeded those of the girls.

Wages of the boys in manufacturing industries were higher in Detroit than in the other cities, especially in the metal industries. For boys employed as semiskilled operatives in the Detroit metal industries the median initial weekly wage (cash) was $20 a week, but for those employed as semiskilled operatives in other manufacturing industries of that city it was only $18.50. In the other groups of cities the median wage of semiskilled operatives was $12 a week. The boys employed in clerical occupations in Detroit had a median weekly wage of $13.50, compared with $8 in the other cities.

The higher wages of the Detroit boys may be partly explained by the fact that they were slightly older when they went to work than the boys in any other city except Rochester, just as the low initial wages for both sexes in Newark and Cincinnati may be partly explained by the fact that the boys and girls from the special classes went to work at somewhat earlier ages than those in the other cities. (See p. 15.) Probably, however, the chief reason for the difference is in the wages customarily paid in the respective cities.

In considering the wages of workers of subnormal mentality, it must be borne in mind that the study covered a period between 1916 and 1924, during which wages, affected by the war, were rapidly increasing throughout the country. The change was especially rapid [54] between 1916 and 1920, when the subnormal individuals were entering employment, and thus the wages of children beginning work in 1916 would be likely to be lower than those of children beginning work in 1920. As the young workers went to work during a 3-year period and as figures for initial wages of children of unselected groups in the corresponding cities in any one year are not available it is not possible to compare the initial wages of the children of this study with the wages of children in general.

In 1923 and 1924 the young workers were receiving considerably higher wages than when they entered industry from three to seven years earlier. Wages of young workers in general increase as they grow older; in the study of Cincinnati children made in the years before wages were affected by the war a steady increase from year to year was noted for both boys and girls; in the fourth year of work wages were more than double those of the first year for both sexes.[55] To what extent the increase in wages of the young persons of the present study indicates their success in adjusting themselves to their jobs and to what extent it merely reflects the general rise in wages between 1917 and 1924 are questions that can not be answered. At least a part of the increase in the wages of those included in the study, as in the increase in the wages of normal children as a whole, can be

[53] The Working Children of Boston, p. 194; An Experimental Study of Children, p. 602; The Working Children of Newark and Paterson, p. 29; New York State Education Department, statement July 1, 1929, entitled "Girls Earn Less Than Boys."

[54] See Union Scales of Wages and Hours of Labor, May 15, 1928, p. 14 (U. S. Bureau of Labor Statistics Bulletin 482, Washington, 1929). The index numbers of union wage rates (1913 being 100) were 106 in 1916, 112 in 1917, and 189 in 1920. The index number in 1924 was 214; that is, wages were almost twice as large in that year as in 1917. See also index numbers for these years for factory pay rolls in New York State which show a similar trend (Industrial Bulletin, issued by the Industrial Commissioner of New York State, vol. 6, No. 5 (February, 1927), p. 140).

[55] An Experimental Study of Children, p. 602.

attributed to the fact that they were no longer children in physical development at least, more than two-thirds having reached at least 20 years of age.

The weekly cash wages of boys in the jobs at which they were employed at the time of the study or in their last previous job if unemployed, ranged from less than $4 to $40 and more. (Table 28.) The wages of the girls varied from less than $4 to $32. The median weekly wage of the boys ranged from $19 in Cincinnati to $27 in Detroit, that of the girls from $12.50 in Cincinnati to $15.50 in Detroit and Rochester and $16.50 in the three California cities. The median wage of Detroit boys employed as laborers or semiskilled operatives in the metal industries was $27.50. Wages common to workers in machine shops and foundries in 1925, the year after the present study was made, when the general level of wages was about the same, are indicated in a bulletin of the United States Bureau of Labor Statistics; the average weekly wages in Michigan machine shops were $22.64 for laborers and $30.96 for all employees.[56]

TABLE 28.—*Last wage and intelligence quotient of boys and girls formerly attending special classes in seven cities*

Last wage and sex	Young persons formerly attending special classes						
	Total		Intelligence quotient				
	Number	Per cent distribution	Less than 50	50, less than 60	60, less than 70	70 and more	Not reported
Boys	603		31	157	246	154	15
Receiving cash wages only	536		30	140	216	136	14
Amount reported	524	100	28	139	209	135	13
Less than $4	2	(a)		2			
$4, less than $8	6	1	3		1	2	
$8, less than $12	14	3	4	2	3	4	1
$12, less than $16	48	9	5	18	16	7	2
$16, less than $20	92	18	5	26	32	24	5
$20, less than $24	106	20	5	35	37	26	3
$24, less than $28	126	24	3	34	57	31	1
$28, less than $32	57	11	3	10	31	13	
$32, less than $36	28	5		5	10	12	1
$36, less than $40	28	5		5	13	10	
$40 and more	17	3		2	9	6	
Amount not reported	12		2	1	7	1	1
Cash and other compensation	52		1	13	25	13	
Other compensation only	7			2	1	3	1
No wages	1			1			
Not reported as to wages	7			1	4	2	
Girls	346		40	109	133	59	5
Receiving cash wages only	308		34	96	119	54	5
Amount reported	303	100	34	94	116	54	5
Less than $4	4	1		1	2	1	
$4, less than $8	13	4	6	3	4		
$8, less than $12	50	17	11	15	16	5	3
$12, less than $16	114	38	8	37	45	22	2
$16, less than $20	72	24	5	23	27	17	
$20, less than $24	34	11	3	10	14	7	
$24, less than $28	11	4	1	3	7		
$28, less than $32	5	2		2	1	2	
Amount not reported	5			2	3		
Cash and other compensation	30		5	10	11	4	
Other compensation only	4			2	1	1	
Not reported as to wages	4		1	1	2		

[a] Less than 1 per cent.

[56] Wages and Hours of Labor in Foundries and Machine Shops, 1925, pp. 5, 145. United States Bureau of Labor Statistics Bulletin No. 422. Washington, 1927.

Older boys and girls received, on the whole, higher wages than those who were younger. For example, 40 per cent of the boys who were 19 years of age or less at the time of the study, compared with 26 per cent of those who were 21 years of age or over, were earning less than $20 a week, whereas only 18 per cent of the younger boys, compared with 29 per cent of those who were 21 years of age or over, were earning as much as $28 a week.

In several recent studies [57] of persons discharged or paroled from institutions for the feeble-minded the evidence presented as to whether or not their male patients are self-supporting after they leave the institutions indicates that many of them do not support themselves. (See Part 2, p. 82.) That many special-class boys, though possibly not the majority, are self-supporting is indicated by the fact that of 495 boys for whom information as to wages and proportion of time employed was available, 204 (more than two-fifths) had been employed at least 70 per cent of the time after leaving school and were earning at the date of the inquiry or in their last jobs at least $20 a week; the 204 included a number who were earning $40 a week. There were 141 other boys who reported wages of $20 or more in their last jobs, but these had not been employed so regularly, 82 of them having been employed between 50 and 70 per cent of the time and the remainder even less. Of 152 unmarried girls for whom similar information was obtained, only 61 had received $16 or more a week; 48 of the latter had been employed at least 70 per cent of the time.

The boys' wages in every city had increased much more than the girls' wages. The wages of the great majority of both sexes (85 per cent of the boys and 72 per cent of the girls) had increased to some extent, but 47 per cent of the boys' wages and only 16 per cent of the girls' wages had increased $10 or more.

Although it would be expected that the wages of mentally subnormal boys of 20 years of age and more, like those of boys of unselected mentality, would be greater than the wages of subnormal girls of the same ages, the greater increase in the boys' wages after they started work is at least partly explained by the fact that proportionately more boys than girls were employed at the time of the survey in 1923–24, when the general level of wages was high. About two-thirds of the boys, compared with two-fifths of the girls, were employed at the time of the study, and many of the boys who were not employed had been out of work but a short time, whereas many of the girls had stopped work some time before in order to get married or for some other reason. Most of the girls who were employed at the time of the study were unmarried.

Another reason why the girls' wages were so much lower and their increases so much less than those of the boys is that they had been at work for shorter periods than the boys, and the wages and the increases received were larger for the individuals, both boys and girls, who were employed the longer periods. For example, 38 per cent of the boys who were employed at the date of the interview and who had worked less than three years, compared with 64 per cent of those who had worked four years or more, had received increases amounting to $10 or more.

[57] Storrs, Harry C., M. D.: A Report on an Investigation Made of Cases Discharged from Letchworth Village (Proceedings and Addresses of the Fifty-third Annual Session of the American Association for the Study of the Feeble-minded, p. 224); Town, Clara Harrison, and Grace E. Hill: How the Feeble-minded Live in the Community—A report of a social investigation of the Erie County feeble-minded discharged from the Rome State school, 1905–1924, pp. 44–46.

Although the boys and girls were earning more than when they started work, the wages of the great majority indicate that they were employed in tasks requiring but little skill.[58] The boys who received in their last job, either at the time of the study or when last employed, weekly cash wages of $28 and more, were engaged in a great variety of occupations. In the manufacturing and mechanical industries 27 per cent of the workers earned $28 or more a week, the same proportion as in all other industries. Few did clerical or messenger work, in which initial wages are low, in their last job. Among the 73 boys receiving $32 or more a week were 50 in manufacturing and mechanical industries; 31 were semiskilled factory operatives, principally employed in Detroit metal industries, a few were skilled workers in the building trades, a few were laborers, and 2 were learners or helpers in various trades. Among the remaining 23 boys were 15 truck or taxi drivers and 1 teamster. (For the occupation, intelligence quotient, and age of boys earning $30 a week, see Appendix, p. 101.)

Among the 50 girls whose wages were $20 or more a week at the time of the study were 38 factory operatives. Of the 5 operatives who earned the highest wages, between $28 and $30 a week, 3 were machine sewers in clothing factories, 1 was a machine stitcher in a shoe factory, and 1 was a core maker in the automobile industry. (For the occupation, intelligence quotient, and age of these girls see Appendix, p. 103.)

INTELLIGENCE LEVELS AND WAGES

The relatively high wages of Detroit boys as compared with Rochester boys can not be explained by any superiority in intelligence of the special-class population of Detroit, as a larger proportion of Rochester than of Detroit boys had intelligence quotients of 70 or more. Neither can the relatively low wages of Newark boys be explained on the basis of intelligence, as the proportions of boys in the different intelligence groups were similar to those in Detroit.

Moreover, no relation can be seen between the level of general intelligence and the first wage of boys and girls whose intelligence quotients were as high as 50. The median wage of boys whose intelligence quotients were between 50 and 70 and of those whose intelligence quotients were 70 and more was the same, $13.50. (Table 27, p. 52.) Similar proportions of boys with intelligence quotients between 50 and 70 and with intelligence quotients of 70 and more earned $20 or more a week—high wages for beginners. This lack of relation between initial wage and intelligence quotient was not peculiar to any one city but was evident both in Detroit and in the other cities where the number of young persons included in the study was large enough to make this comparison significant.

The number of individuals whose intelligence quotients were less than 50 is too small to warrant conclusions, but it should be noted that a number of them (8 of 28 boys and 9 of 31 girls) earned less than $8 a week. On the other hand, 5 boys and 3 girls earned as much as $20 a week.

The boys who were relatively superior in general intelligence earned slightly better wages in their last jobs and had slightly greater increases in wages than boys of relatively inferior intelligence. Although

[58] See Union Scales of Wages and Hours of Labor for union wage rates in the building and other skilled trades. Union wage rates for workers in the building trades for Cincinnati, for example, the city in which the workers of subnormal mentality reported the lowest wages, ranged from $40.50 a week for hodcarriers and plasterers' laborers, to $47 for painters, $51 for carpenters, and $66.75 for plasterers (pp. 39, 41).

boys of all levels of intelligence were found among those who earned low as well as high wages in every city, twice as many of the boys with intelligence quotients of 60 or more as of those with lower intelligence quotients had earned weekly amounts of $28 or more. (Table 28, p. 54.) Only 15 per cent of the boys in all cities whose intelligence quotients were less than 60, 30 per cent of those whose intelligence quotients were between 60 and 70, and the same percentage of those with intelligence quotients of 70 and more were earning $28 or more a week. Of the 17 boys who earned as much as $40 a week, only 2 had intelligence quotients of less than 60 and none of less than 50.

The boys of the higher intelligence levels had also had greater increases in wages than boys of the lower levels. (Table 29.) Although the great majority of the boys of all levels of intelligence were earning larger amounts in their last than in their first jobs, increases of $10 and more a week were more common among boys with the higher intelligence quotients; 36 per cent of the boys with intelligence quotients of less than 60, 49 per cent of those with intelligence quotients between 60 and 70, and 57 per cent of those of higher levels earned at least $10 more in their last than in their first jobs. Only girls who were employed at the time of the study were receiving considerably higher wages than when they started work. The girls who were unemployed at the time of the study on the whole had not worked long enough for differences in earning capacity to appear. Twenty-five of the 67 girls employed at the time of the study whose intelligence quotients were less than 60 and 34 of the 80 whose intelligence quotients were higher were earning at least $5 more a week than when they started work.

TABLE 29.—*Difference in cash wage received for first and last job and intelligence quotient of boys formerly attending special classes in seven cities*

Difference in cash wage for first and last job	Boys formerly attending special classes									
	Total		Intelligence quotient							
			Less than 50 [1]	50, less than 60		60, less than 70		70 and more		Not reported
	Number	Per cent distribution		Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	
Total	603	-------	31	157	-------	246	-------	154	-------	15
Difference reported	477	100	24	126	100	186	100	129	100	12
Increase	405	85	14	104	83	163	88	113	88	11
Less than $5	62	13	4	21	17	24	13	11	9	2
$5, less than $10	118	25	6	33	26	47	25	29	22	3
$10, less than $15	118	25	2	31	25	45	24	36	28	4
$15, less than $20	56	12	1	11	9	25	13	18	14	1
$20 and more	51	11	1	8	6	22	12	19	15	1
Decrease	41	9	7	12	10	10	5	11	9	1
No change	31	6	3	10	8	13	7	5	4	-------
Difference not reported [2]	126	-------	7	31	-------	60	-------	25	-------	3

[1] Per cent distribution not shown because the number of boys is less than 50.
[2] Includes boys receiving compensation other than cash only and boys for whom either or both first and last wage was not reported.

The fact that intelligence appeared to be associated with their last but not with their first wages was no doubt largely due to the fact that their last wage was for work that they were better able to do than that which they happened to find when they first left school. That this is so is indicated by the much greater duration of the last jobs, both those terminated and those unterminated at the time of the study, as compared with the duration of their first jobs.

A correlation between the intelligence levels and the wages of mental defectives was found in a study of 100 institutionally trained male defectives, most of whom had left the Massachusetts Training School from two to three years before that study was made in 1922. The greatest number of boys whose mental age was 8 years were earning $18 a week; those whose mental age was 9 years were earning $20 a week; those whose mental age was 10 years, $24 a week; and those whose mental age was more than 10 years, $26 a week.[59] On the other hand, in a study of feeble-minded ex-school children made by Doctor Woolley in Cincinnati, in 1918, "the correlation between intelligence and earnings was strikingly less than might have been expected."[60] The group of 96 children for whom earnings and intelligence quotients were reported in this study was perhaps too small to be conclusive.

SCHOOL ACCOMPLISHMENT AND WAGES

A larger proportion of the young persons who had done good work in the industrial courses offered in the special classes than of those who had done poor work had had their wages increased, and the increases were larger. Ninety-three per cent of the boys who had done good work, compared with 72 per cent of those who had done poor work, had had increases in wages; 58 per cent of the former, compared with 28 per cent of the latter, had had increases of $10 a week or more. Although the figures for girls are too small to be of much significance, a relation between work in school and increase in wages was found for the girls. The number of boys and girls for whom grade attained in industrial work was reported was small, yet it is indicative that only 10 per cent of 86 boys who had not attained the sixth grade had had wage increases of as much as $15, compared with 32 per cent of 130 boys who had reached the sixth or a higher grade or had had training in the Rochester prevocational school.

CASES ILLUSTRATING RELATIVELY HIGH BOYS' WAGES

The following histories show the steady increase in wages during their work histories of seven boys whose intelligence quotients ranged from 57 to 78 and who succeeded either in learning a skilled trade or in getting employment in occupations that involved some skill or responsibility.

Case 31 (Detroit).—Benjamin, a boy with an intelligence quotient of 57, started work in 1920 at the age of 16, earning $12 a week; four years later, at the age of 20, he was earning $32.50 a week in his trade of baker. He had been in the special class only 3½ months, having been in the regular grades practically all his school life. From the time he left school to the date of the study he worked for the same employer in a restaurant. For the first two years he was a bus boy getting $12 a

[59] Matthews, Mabel A.: One Hundred Institutionally Trained Male Defectives in the Community under Supervision, pp. 5 and 11. National Committee for Mental Hygiene, Reprint No. 145. New York, 1922.
[60] Feeble-minded Ex-School Children, p. 255.

week and two meals a day. He wanted to be a baker, and his employer gave him an opportunity to learn the trade in the restaurant bake shop, raising his wage to $14 a week. During a 9-month period of learning the boy received increases in wages every three months. At the end of this time he was promoted to the full work of a pie and pastry baker, put on night duty, and given $25 a week and two meals. Within the one year that he had been employed in this capacity he had been given further increases amounting to $7.50 a week.

Case 32 (Detroit).—David had received steady increases in wages since starting to work. In 1920, when nearly 16 years of age, he began at $12.50 a week; at the time of the study, when 19 years of age, he got $36. David had an intelligence quotient of only 61 at the time he left school, although according to a test given him a year earlier it was 68. He was well spoken of by his school-teachers, who described him as having "all the qualities that would make a man of him." He had done good work in manual training and had reached the sixth grade in some of his school studies. His first job was in a brass foundry on a reaming machine, but he was laid off twice during the first year of his employment there, and his wages had not been increased. Through his father and brother, both of whom were employed as foremen for a brick-manufacturing concern, he obtained work there as a teamster at $24 a week, twice as much as he had earned in his previous position. In six months he was promoted to a job in the brickyard setting pallets at $27 a week. After about a year he was transferred to another job, for which he received $30 a week. For one year he made about the same wages and was then promoted to a job as clay temperer with a $6 weekly increase in pay. At the time of the inquiry he had been earning $36 a week for more than a year.

Case 33 (Los Angeles).—Angelo started his industrial career at the age of 16, earning $16.80 a week; five years later, in 1924, he was making $36 a week at his trade of boilermaker. Of Italian parentage, he had been born in the United States but had spent his early childhood in Italy, returning to the United States and entering school when 12 years of age. When 14 he was transferred from regular school to a special class, where he remained for two years. His intelligence quotient was 66 (Goddard revision). He had done fifth-grade work in regular-school subjects and seventh-grade work in manual training. The mental examiner noted that he was able to concentrate, and his teacher said that he was conscientious and a careful worker, taking pride in doing his work well. His first job on leaving school was as punch-press operator for a pipe-manufacturing company. When he was laid off from this job after five months, on account of slack work, he returned to a meat market where he had worked part time before leaving school. His wages on this job were only $6 a week for cleaning and sweeping and other odd jobs. His father was employed in the railroad shops of the city and when Angelo was 17 years of age he got work there as apprentice boilermaker. He served the full four years of the apprenticeship, becoming at the end of that time a journeyman boilermaker. During the training period he attended the railroad-shop school for four hours a week. He was paid according to the regular wage scale, starting at $14 a week. After two months he received $20 a week and during the rest of his apprenticeship received increases every six months. At the end of the apprenticeship period he was earning $32 a week and when promoted to be a boilermaker, $36. After he had been employed as boilermaker for only three weeks he was laid off and was unemployed at the time of the study. His employer at the railroad shops said that a temporary reduction in force had been made, the men being laid off in order of seniority, and that the boy was a satisfactory worker and would be taken back as soon as employment conditions warranted.

Case 34 (Los Angeles).—Elmer, with an intelligence quotient of 66 (Goddard revision), was one of the few boys who was earning more than $40 a week at the time of the survey. He was a welder by trade. In the special class he had done fourth-grade work in academic subjects and had reached the sixth grade in industrial subjects in which he was rated as good. He left school in 1919, when he was nearly 16 years of age, and started work at $18 a week. Through a relative he found employment with a pipe-manufacturing company with which he had worked most of the time up to the date of the survey. He had left several times but was always reemployed. His first job for this company was as riveter's helper. After six months he was transferred to another job, that of apprentice welder. After a year's training he was employed as welder, earning $36 a week. At the time of the inquiry he was 20 years of age and earned $43 a week.

Case 35 (*Rochester*).—Julius earned $19 a week when he started work at the age of 16; at the time of the inquiry he was 20 years of age and earned $30 a week as apprentice floor layer. His intelligence quotient was 67 (Stanford revision), and he had done excellent work in his manual-training courses in the special class and fourth-grade work in regular-school subjects. He was said by his teachers to be obedient, attentive, and eager to learn. On leaving school he got a job as general helper in the shipping department of a factory. The second year after leaving school, through a newspaper advertisement, he obtained a job with a hardwood-floor company as apprentice floor layer at $12 a week, only about half what he had been receiving in his previous job. But Julius did good work and received steady increases; in less than two years he was receiving the maximum amount paid until the full apprenticeship of four years had been served. His employer reported that he was a slow learner but a satisfactory floor layer so long as he worked under supervision. Once when he was sent out alone to lay a floor complaints came in about his work, and he was not given as much responsibility again. Soon after this he met an independent floor layer who offered him $30 a week while still continuing his apprenticeship, and as this was a considerable increase over the wage he was receiving at that time he accepted the offer. He had been working for this employer seven months at the time of the Children's Bureau agent's visit and was reported as doing very satisfactory work, although he was not allowed to go out on jobs alone.

Case 36 (*Newark*).—Joseph, whose intelligence quotient varied from 57 to 67 according to several tests (Goddard revision) given him while attending the special class, began work in 1919 earning $3 a week. At the time of the study four years later, he received $35 a week. In school Joseph had been able to do only third-grade work in most of the regular-school subjects, but he was considered an excellent worker in the manual-training classes. According to his teachers he was an obedient boy and able to concentrate. His father, a Russian by birth, was a handle maker in a leather factory, and his brother was a foreman in an establishment manufacturing traveling bags. Through the help of his father, Joseph obtained work in the leather factory where the former was employed, and started work at $3 a week. He was employed in various operations, such as covering handles and lining trunks, and in less than two years was earning $30 a week. His employer said that he was "one of the quickest boys" he had ever had. When the firm went out of business, Joseph obtained work as frame coverer in the factory in which his brother was foreman. Here he started work at only $12 a week, but in the next year and a half his pay was steadily increased until he was again earning $30 a week. At the end of this time he left to work in another factory under his former foreman, who offered him a job as box maker, work including several hand processes as well as operating a sewing machine, at $35 a week.

Case 37 (*Newark*).—Pete, with a relatively high intelligence quotient of 78 (Goddard revision), also had the advantage of special musical ability. At the time of the study he was 22 years of age and earned $40 a week as drummer in a band in a cabaret restaurant. Not until some years after he left school was Pete able to make use of his talent. In the special class he had done sixth-grade work in industrial subjects and apparently had done well, but on leaving school he was at first unable to find any work at all, possibly because of a shy and timid personality. After a year's idleness he got his first job, at the age of 17, helping on a laundry wagon at $5 a week. He remained in this occupation for a year with no raise in pay. At the end of this time a friend, who recognized his musical ability, helped him obtain work as drummer in a band. Pete started at $28 a week and was soon earning $30 a week. For three years he played in the same band; afterwards he was continuously employed by different bands in various restaurants, with increased wages.

SUCCESS IN JOBS

Information on whether or not these mentally deficient young workers had been able to meet the requirements of their jobs was obtained for 3,775 jobs, 60 per cent of the total number reported by those interviewed. The boys were reported to have been unsatisfactory in their work in 22 per cent, and the girls in 20 per cent, of these jobs. These figures include jobs from which the young persons, according

to their own or relatives' statements, had been discharged, but for which no information could be obtained from employers. Although most of the boys and girls were reported as unsatisfactory in some of the jobs they had held, only 1 per cent of the boys and 7 per cent of the girls had never been considered satisfactory in any job.

Unfavorable reports as to work were not confined to any particular type or group of occupations. The boys and girls were about as likely to prove unsatisfactory in one kind of work as another. For example, the boys were said to have been unsatisfactory in 20 per cent of their jobs as factory operatives, in 24 per cent of their jobs in clerical work (chiefly errand work), and in 32 per cent of the jobs they had as learners in manufacturing and mechanical industries. The girls had not done well in 20 per cent of their jobs as factory operatives, 21 per cent of their jobs in personal and domestic service, and 16 per cent of their jobs in sales or stock work. In this connection it may be noted that in a study of 500 sales clerks in a department store it was found that although sales clerks of normal intelligence were more likely to succeed than those of inferior intelligence, nevertheless a small proportion of those with defective intelligence (that is, those whose intelligence quotients were less than 70) also proved successful in this work.[61]

EMPLOYERS' OPINIONS

In addition to the examples already given of individuals who had been successful in their work (see cases illustrating occupations, 13, 14, 17, 23, 28, 29 (pp. 46–51)$_7$ and cases illustrating wages, 31–37 (pp. 58–60), the opinions of some of the employers about individuals who succeeded were as follows:

One boy (intelligence quotient 59) had been employed for more than a year pushing a hand truck between the various buildings of a manufacturing establishment. According to his employer he was "faithful and reliable, and the work does not require much else."

A boy (intelligence quotient 57) at the time of the study had been errand boy and upholsterer's helper for nearly four years, his wage having increased from $8 a week to $17 a week. According to his employer he was incapable of ever becoming an upholsterer but was nevertheless very satisfactory as upholsterer's helper—"a good, husky lad, honest and steady, always on the job."

Another boy (intelligence quotient 57) was described as "one of our best employees." His work was to assemble condensers in the radio department of a metal-manufacturing establishment, a job that he kept, however, for only a month, leaving to take a better-paying job.

A girl (intelligence quotient 64) who had done assembling in a jewelry establishment for nearly five years was "one of our nicest girls."

The special ability of one boy (intelligence quotient 61) in handling tools had been noticed by the teacher of the special class. At the time of the study the boy had been a toolmaker's apprentice for more than three years. His employer said that he was doing well and was a "natural-born mechanic."

[61] Anderson, V. V., M. D.: Psychiatry in Industry, pp. 246, 247. New York, 1929.

Another boy (intelligence quotient 66) who was learning a skilled trade had been employed by his father for nearly three years to repair automobiles and had also repaired cars on his own account. His family said of him, "There is nothing about an automobile he does not understand."

One boy (intelligence quotient 55) had had several jobs as helper on a truck and at least three different jobs driving a horse and wagon, lasting from one to five months. One of his employers said, "He was a good boy but was restless and would not stay." Another said, "He was a very good worker, and I would have kept him but he wanted more pay."

Operating a freight elevator in a factory was another type of work in which a negro boy (intelligence quotient 59) had proved satisfactory up to the time of the study. He had been employed for nearly four years in this occupation for the same establishment and was said to be "better than any other boy in this job during the last 10 years."

The intelligence quotient of one boy who had worked as bundle boy in a retail store steadily for more than four years was relatively high (71). His employer told the bureau representative that he wished "he had 50 more boys like him."

Other employers found the work of the subnormal individuals unsatisfactory:

One boy (intelligence quotient 58) had worked as a laborer loading coal for about a month for a coal company, but his employer said "although it was work anybody could do and he does it as well as other boys, he can't take any responsibility." This boy had also been employed off and on for a few weeks or months at a time as laborer doing odd jobs in an establishment manufacturing pipes and heaters. "The boy is of no account as a worker," this employer said, "but I take him back each time because I am sorry for his mother."

One of the girls (intelligence quotient 60) employed as a factory operative had stayed for more than three years in a drug-manufacturing establishment, labeling in the finishing department. "She was never quick but was taken on when girls were hard to get and kept because we were sorry for her," her employer said.

Another employer said of one girl (intelligence quotient 57) who had worked in a paper-box factory for three weeks before she was discharged as incompetent: "We tried her on several things, on table work and in the packing room, but she did not accomplish anything, and we had to let her go."

A boy who did errand work had been employed in a vegetable and fruit store. His intelligence quotient was 53. "He was satisfactory as a delivery boy, but we could not teach him to wait on customers."

A boy whose intelligence quotient was 52 tried to learn to be a baker and for more than two years worked steadily in bakeries. One employer said, "He could not keep anything in his head. We would tell him the same thing every day, but he never would learn." Another employer explained that, "he was given every opportunity to learn the trade but was slow and indifferent and never showed the least interest."

Another boy (intelligence quotient 64) was apprenticed to a barber. According to his employer, "He knew no more when he left than when he started work five months before."

One of the girls (intelligence quotient 66) wanted to become a hairdresser. She paid a hairdresser $5 to teach her, but after two days her employer decided the girl could not learn, refunded the money, and kept the girl to do cleaning.

The father of one boy was a carpenter and hoped to teach the boy that trade, but finally gave up the idea. The father had the privilege of hiring any helper he wished, and during a period of about a year's time he took the boy with him on his different jobs. The boy (intelligence quotient 65) was "not a good worker, fooled around, and was not competent," and the father "got the blame." At the time of the study the boy was employed as a laborer in a factory.

A truck driver with an intelligence quotient of 69 had been discharged three times—twice for damaging the cars and once for unreliability. A fourth employer, although he did not actually discharge him, said that the boy could not hold down a job as truck driver because he was not strong enough or sufficiently reliable.

A boy (intelligence quotient 63) was discharged from two of his three jobs driving automobiles. One job he kept two weeks and was then discharged for "smashing the truck"; the other job he kept for a week, when he was arrested for reckless driving and sentenced to 30 days in jail.

REASONS FOR LEAVING JOBS

To get, if possible, more information on the success of the young workers, they were asked why they left each job, and whenever possible their reasons were verified and supplemented by statements from their employers. Whether they left their jobs voluntarily, were laid off, or were discharged is shown in Table 30.

TABLE 30.—*Reason for terminating all jobs held by boys and girls formerly attending special classes in seven cities*

Reason for terminating job	Terminated jobs held by boys and girls formerly attending special classes			
	Boys		Girls	
	Number	Per cent distribution	Number	Per cent distribution
Total	4,090		1,580	
Reason reported	3,956	100	1,553	100
Left of own accord	2,201	56	901	58
Laid off by employer	1,036	26	342	22
Discharged by employer	463	12	153	10
Inefficiency	296	7	112	7
Undesirable employee	18	(1)	7	(1)
Misconduct	79	2	24	2
Other	12	(1)	1	(1)
Not reported	58	1	9	1
Change in occupation	256	6	157	10
Promotion	162	4	78	5
Demotion	15	(1)	5	(1)
Transfer	79	2	74	5
Reason not reported	134		27	

[1] Less than 1 per cent.

The majority of the jobs (56 per cent of the boys' jobs and 58 per cent of the girls') were given up voluntarily. According to the young workers' statements, they usually left because they did not like the work; some said they left because they wanted better wages, a better job, or a "change." The boys left 4 per cent of their jobs and the girls 5 per cent for what they believed to be a better job. Only 4 per cent of the boys' jobs and 8 per cent of the girls' were ended because of illness or injury. Eleven per cent of the girls' jobs were ended because of marriage or pregnancy.

Boys were laid off from 26 per cent of their jobs and girls from 22 per cent, some because of the fact that their jobs were temporary, others because of a slack season in industry, and others because of a change in the employer's business. For example, some of the girls who did saleswork in department stores were taken on only as "extras," and some of the boys who were helpers to drivers were employed off and on when additional help was needed. No doubt during a slack season in industry the less desirable employees are laid off first and are not reemployed, and this would account for many of those who gave a "lay-off" as the reason for losing their jobs. No figures are available, however, to show whether as large a proportion of workers of unselected mentality as of these young people are laid off from their jobs.

Occasionally the young workers were transferred from one occupation to another in the same establishment; in 4 per cent of the boys' jobs and in 5 per cent of the girls' jobs these transfers were promotions. Seldom were the young persons transferred to less desirable or more poorly paid jobs.

In 12 per cent of their jobs the boys, and in 10 per cent of their jobs the girls, had been so unsatisfactory that they were discharged. Inefficiency was the most common reason for discharge—it was the reason given in 73 per cent of the jobs from which the boys reported the reason for discharge and in 78 per cent of the jobs from which the girls reported the reason for discharge. Misconduct was the next most important cause of discharge.

Whether these workers were discharged more frequently than workers of unselected groups can not be determined in the absence of comparable figures. Little, if any, relation was found between the intelligence levels of the young workers in this study and the frequency with which they were discharged. Approximately the same proportion of girls with intelligence quotients of 70 and more had been discharged as of girls with intelligence quotients of less than 60; and the difference in the proportions of discharged boys with intelligence quotients of 70 and more and of less than 60 (49 per cent and 39 per cent, respectively) was not large enough to be significant.

That the relation is not more evident between the degree of intelligence and the frequency with which the workers were discharged may be due to personality, which, no doubt, is as important a factor in the industrial success of workers of subnormal mentality as it is in the success of persons of normal mentality. The behavior of those included in the study apparently was closely related to lack of success in the job. Seventeen per cent of the discharges were for misconduct, and 4 per cent were because the employee was "undesirable." As has been said, a relatively small number of the individuals included in the study were actually put on probation or sent to

institutions as delinquents, but 52 per cent of the 93 delinquent boys as compared with 41 per cent of the 453 not classified as delinquent had been discharged from one or more of their jobs.

Discharges were as common from the jobs that the boys and girls had had the longest time as from those that they had when they first went to work; 8 per cent of the boys were discharged from their first jobs and 10 per cent from the jobs that they had had for the longest time. The young persons were usually discharged before they had been employed more than a few months, but sometimes they were discharged from the job they had had for a year or more. Rarely were they discharged from all their jobs, but two-fifths of the boys and about one-third of the girls had been discharged from at least one of their jobs, and a small proportion of each sex had been discharged from two or more jobs. (Table 31.)

TABLE 31.—*Number of times discharged from jobs and intelligence quotient of boys and girls formerly attending special classes in seven cities*

Number of times discharged from jobs and sex	Young persons formerly attending special classes									
	Total		Intelligence quotient							Not reported
			Less than 50	50, less than 60		60, less than 70		70 and more		
	Number	Per cent distribution	Number [1]	Number	Per cent distribution	Number	Per cent distribution	Number	Per cent distribution	
Boys	603	-------	31	157	-------	246	-------	154	-------	15
Times discharged reported	550	100	28	142	100	226	100	140	100	14
None	312	57	17	86	61	130	58	71	51	8
Once	145	26	5	35	25	61	27	41	29	3
Twice	53	10	2	8	6	21	9	20	14	2
3 or more	40	7	4	13	9	14	6	8	6	1
Times discharged not reported	53	-------	3	15	-------	20	-------	14	-------	1
Girls	346	-------	40	109	-------	133	-------	59	-------	5
Times discharged reported	332	100	40	104	100	127	100	58	100	3
None	230	69	28	74	71	87	69	40	69	1
Once	75	23	9	24	23	29	23	11	19	2
Twice	15	5	1	4	4	5	4	5	9	-------
3 or more	12	4	2	2	2	6	5	2	3	-------
Times discharged not reported	14	-------	-------	5	-------	6	-------	1	-------	2

[1] Per cent distribution not shown because number of boys and number of girls was less less than 50.

The proportion of discharges in the different occupational groups into which the jobs were classified did not vary greatly, although among the girls there were a few more discharges from domestic work and sales and stock work than from factory work. Girls were discharged from 15 per cent of their jobs in domestic and personal service, from 11 per cent of their jobs in sales or stock work, and from 7 per cent of their factory jobs. Among the boys truck drivers were discharged more frequently than those in other types of work, 24 per cent of such jobs ending in discharge as compared with 11 per cent of the total number of jobs from which discharges were recorded.

In a study of employees of a department store psychological tests were given to 116 truck drivers; only 7 were border-line defectives or definitely feeble-minded, but all 7 were in the group that had frequent accidents while driving.[62]

Discharges from work on power machines were not more frequent than from other types of factory work; the young persons were discharged from 17 per cent of their jobs on power machines in the industries in which they were chiefly employed and from 15 per cent of all their jobs as semiskilled operatives. Persons of subnormal mentality are in especial danger of accidents in this type of work, however, and in several cases boys and girls from the special classes had been discharged because of injuries received or because the employer was afraid they would be injured.

SUMMARY AND CONCLUSIONS

As other studies of the histories of former special-class pupils have done, this study demonstrates that most pupils of special classes enter industry. More than nine-tenths of the boys and girls who had been enrolled in special classes for mental defectives in the public schools of seven cities in different parts of the country and who were selected for investigation had been employed after leaving school.

The present study covers the employment histories of 949 boys and girls who had been employed. Most of these boys and girls could be roughly classified mentally as morons, but some were high-grade imbeciles and others were only slightly subnormal; more than two-thirds had intelligence quotients between 50 and 70 and more than one-fifth of 70 or more. Fifteen per cent had been delinquent at some time before the study was made and, as a consequence, put on probation or committed to institutions for defectives or delinquents.

At the time of the inquiry, from three to seven years after the boys and girls had left school, 61 per cent (71 per cent of the boys and 43 per cent of the girls) were gainfully employed. The small proportion of girls employed is due to the fact that many had married; 58 per cent of the unmarried girls, nearly as large a proportion as of the boys, were employed when interviewed. Only 3 per cent of the former special-class pupils were in institutions, either for defectives or for delinquents, at the time of the study.

On the whole, young persons who have passed through special classes are employed for the greater part of the time after they leave school, but not so steadily as young persons of unselected mentality. In the first years of their working lives covered by the present study the majority of the boys and unmarried girls of defective mentality were unemployed at least one-fifth of the time. The findings of several studies of young workers in attendance at continuation schools showed less unemployment for workers of unselected mentality. The continuation-school pupils of Milwaukee are more nearly comparable in age and length of work history to the mentally deficient young workers than other continuation-school children about whom similar studies have been made. Sixty-three per cent of the Milwaukee boys, compared with 29 per cent of the boys from special classes, had been out of work as little as one-tenth of their possible work histories, and similar differences in the amount of unemployment were found among the Milwaukee girls and the girls from the special classes.

[62] Psychiatry in Industry, p. 279.

Like young workers in general, these boys and girls had a number of positions in the first years of their working lives; the boys averaged six positions and the unmarried girls four, the number, at least in the case of the boys, varying somewhat with the number of years that had elapsed since they left school.

The duration of the first positions of the young workers was short; 40 per cent, about the same proportions of boys and girls, stayed with their first employers less than three months. But this experience of keeping their first positions only a short time is common to all young workers; it is not peculiar to those of subnormal mentality. The individuals from the special classes kept their first positions somewhat longer than the children of unselected mentality included in studies made by the Children's Bureau in Boston, Newark (N. J.), and Milwaukee. (See p. 22.)

Most of the boys and girls included in this study had held one position for a long time; 74 per cent of the boys and 69 per cent of the unmarried girls had worked continuously for one employer for at least a year, and 37 per cent of the boys and the same proportion of the girls for at least two years. Many of those employed at the time of the study had been working continuously for the same employer for two or three years.

The occupations in which the boys and girls found employment were mostly of the unskilled and semiskilled types, requiring little if any industrial training or academic education. The many simple hand and machine operations of the modern factory provide opportunities for work that mentally deficient persons are capable of doing. As has been brought out in other studies, many mentally defective city children find work in factories. About three-fifths of the occupations in which the boys and girls were employed after leaving school were in the manufacturing and mechanical industries, most of the girls being factory operatives, the boys both factory operatives and laborers. Both boys and girls were employed in the chief industries of the cities in which they lived. Only a few boys had been successful in learning a skilled trade; a few others had attempted or were still trying at the time of the study to learn a trade. The work of the boys who were not in manufacturing and mechanical industries was varied and included such occupations as truck drivers or teamsters, helpers to drivers, farm laborers, general helpers in stores or markets, and privates in the Army or Navy. Most of the girls who were not in factories were in personal and domestic service. Only a relatively small number of either sex had attempted office work or saleswork, types of work that considerable proportions of young persons of normal mentality enter; but they had done errand and messenger work and bundle and cash work in stores and had helped in the stock and shipping rooms of factories and stores.

The wages of the boys and girls included in the study were apparently limited to those paid for unskilled and semiskilled work and were relatively low in comparison with the wages of skilled mechanics. The median cash wage for the boys in their last jobs, which in most cases meant wages received in 1923 or 1924, ranged from $19 a week in Cincinnati to $27 in Detroit, where many boys were employed as laborers or semiskilled operatives in the metal and automobile industries in which wages were relatively high. About 14 per cent of the boys, some in each city, were earning $32 or more a week. The girls'

median cash wage in their last job ranged from $12.50 a week in Cincinnati to $16.50 in the California cities and was slightly higher for those who were employed at the time of the study than for those who had stopped work some time before. To judge from their wages and the regularity with which they worked, it would appear that the annual earnings of a large proportion of the former special-class pupils would enable them at least to support themselves. Two hundred and four of 495 boys for whom the information was obtained had been employed at least 70 per cent of the time after they left school and had earned at least $20 a week in their last jobs; the 204 included a number who earned at least $40 a week.

Both the boys and the girls studied were unsatisfactory in about a fifth of their jobs; the boys were reported to be unsatisfactory in 22 per cent, and the girls in 20 per cent, of the jobs about which information was obtained. Only 12 per cent of the boys' jobs and 10 per cent of the girls' jobs had actually ended in discharge. Unfortunately no comparable figures are available for workers of unselected mentality to show whether or not individuals from special classes were discharged more often than other workers.

The present study does not show any relation between the intelligence ratings of the individuals and the steadiness with which they had worked or the number of times they had been discharged from their jobs. To what extent other factors, such as delinquency, may have affected the employment of those of the higher intelligence levels can not be ascertained from the facts found in this study. In addition to the small number who had been placed on probation or committed to institutions for delinquents by the courts, however, no doubt there were many whose conduct in school at least had been troublesome, especially as some of relatively high mental capacity had been transferred from the regular grades to the special class on account of their behavior.

The importance of traits other than general intelligence, such as character and personality, in relation to success has been emphasized by psychiatrists and others who have dealt with the mentally deficient. Dr. Walter Fernald has said that the behavior and conduct of a mental defective is just as important as his intelligence quotient. [63] One psychologist in studying the work experiences of mentally defective girls concluded that those of the steady, lethargic type can be absorbed into industry but that the restless, unstable type can rarely qualify.[64] A definite relation between industrial adjustment and personality defects was brought out in a study of the employment histories of individuals from special classes.[65] Further intensive study of the relation between the personality of mental defectives and their industrial adjustment should be made, and, so far as possible, a practical scale of measurement for social behavior to supplement intelligence tests should be worked out.

The boys and girls who could be roughly classified as in the upper or middle moron groups or as border-line cases (that is, those whose intelligence quotients were 60 or higher) had a wider choice of occupations and received higher wages than those of relatively inferior mentality. Both the boys and the girls whose intelligence quotients

[63] Proceedings and Addresses of the Forty-eighth Annual Session of the American Association for the Study of the Feeble-Minded, 1924, p. 215.
[64] Adjustment of the Feeble-minded in Industry, p. 9.
[65] A Study of the Careers of 322 Feeble-minded Persons, p. 30.

were less than 50 were the most restricted in their choice of occupations. The wages of boys in the upper intelligence groups, at least at the time of the study or when they had last been employed, were somewhat higher than the wages of boys in the lower intelligence groups. Conclusions in regard to the relation between the girls' wages and their levels of intelligence could not be made, as the number of employed girls was too small to serve as a basis. No relationship appeared between the initial wages and the intelligence quotients of either boys or girls.

The importance of special aptitude for handwork in industrial success is indicated by the fact that boys and girls who had done well and had been in the upper grades in manual training and other kinds of handwork taught in the special classes were more likely to be successful in their jobs after they left school than those who had done poor work and had been in the lower grades. Both boys and girls who had done good work in industrial subjects had had less unemployment on the whole, had held their positions longer, were earning better wages in their last jobs, and had had greater increases in pay after they entered industry than those who had done poor work in special-class subjects.

In view of the lack of occupational training and vocational guidance given most of the young persons included in the present study, it is perhaps surprising that by the trial-and-error method they had succeeded as well as they did in getting and keeping employment. The need of further development of special training for mentally deficient children can not be questioned. Since the present study was made, experiments have been carried on in training mentally subnormal persons incapable of learning a skilled trade, in one process or operation, with the idea that they may become operators in simple repetitive processes. Girls of less than average mentality in New York City are admitted to the extension classes of the Manhattan Trade School for Girls. The Vocational Adjustment Bureau of New York maintains a workshop in which subnormal and maladjusted girls are trained in simple machine and hand processes, and this bureau has worked out occupational tests for particular occupations to which mentally deficient girls are adapted.[66] The attempt is made to coordinate the training given with such opportunities for employment as are actually available and to place the girls after they are trained.

The need for the development of a system of placement and supervision for pupils from special classes is indicated by the fact that only 5 per cent of the individuals in the present study had had any help from the school or from placement offices in getting work for which they were fitted or in which any special ability that they might have had could be utilized. The special committee organized in Cincinnati in 1920 to give advice and supervision to mentally defective children was a start in this direction. Since this study was made, the public schools of two of the California cities have employed a special worker who is in charge of advising and placing special-class children in suitable work after they leave school.

[66] For a description of the work of this organization see Adapting the Feeble-minded to Industry, by Emily Thorp Burr (Vocational Adjustment Bureau Bulletin No. 3, 1927) and Vocational Training for Subnormal Girls, an experiment in the garment-machine operating trade, by Edna W. Unger (reprint from the Journal of Personnel Research, vol. 5, No. 6 (October, 1926)).

PART 2.—BOYS AND GIRLS FORMERLY IN ILLINOIS STATE INSTITUTIONS FOR THE FEEBLE-MINDED

METHOD AND SCOPE OF STUDY

This report of the employment histories of boys and girls who had been in the two Illinois State institutions for the feeble-minded, the Lincoln State School and Colony and the Dixon State Colony, was based on a study of young persons leaving these two institutions between January 1, 1918, and April 30, 1925.[1] All boys and girls leaving the institutions in the selected period who had been residents of Cook County before admission and who were under 21 years of age at the time they left were included in the study except those who were classified at the institutions as idiots or low-grade imbeciles. The last date selected, one year before the date of the study, was decided upon so that each individual would have had at least one year during which he might have been employed. Two hundred and thirteen young persons under 21, former Cook County residents, classified as morons or imbeciles of the higher grades, had left the institutions between the dates selected. Information concerning the history of 167 of these after leaving the institutions was ascertained; the remainder could not be located or had moved too far away to visit. Sixteen of the 167 had been placed in institutions, had died, or had moved and could not be located before the year had passed; 151, however, had been in the community outside institutions for at least one year. Of this number 134 had had some employment, and facts were obtained about their work experience.

The intelligence ratings, schooling, physical defects, delinquency records, and some facts about the families of the young persons studied were obtained from institutional records. For the history of their employment and for additional social facts, home visits were made and interviews held with the parents or other relatives of the young persons and, wherever possible, with the boys and girls themselves. Visits were also made to employers, and court and social-agency records were consulted. Satisfactory information concerning the amount of time the young persons had actually been employed and the number of positions they had held was not obtained for all the boys and girls included in the study. Information on these points was difficult to get, as the statements of the young persons and of their relatives were sometimes unreliable and employers' records were not always available.

THE GROUP STUDIED

According to the mental tests given the young persons at the institutions,[2] the majority of them would be classified as middle-grade

[1] At the time of the inquiry in June, 1926, the two institutions had a population of about 3,500 feeble-minded persons of both sexes and of all ages and of varying degrees of mental defect, from idiots to borderline cases. Two hundred and seventy-five persons had been discharged from the two institutions in 1926. In addition to these, 496 persons had been released and 170 had escaped. (Ninth Annual Report of the Illinois Department of Public Welfare, July 1, 1925, to June 30, 1926, p. 398. Springfield, 1927.)

[2] The Stanford revision of the Binet-Simon test was used wherever available; for some of the earlier cases the Goddard revision, although not exactly comparable, was accepted for this study. In computing intelligence quotients for persons over 16 years of age, 16 years was considered as the adult age level.

morons, some as high-grade imbeciles, and a few as only slightly subnormal. One hundred and thirteen (69 per cent) of the 167 boys and girls included in the study had intelligence quotients between 50 and 70, 28 (17 per cent) had intelligence quotients of less than 50, and 23, nearly as large a proportion, had intelligence quotients of at least 70, usually considered as the border line of feeble-mindedness. (Table 32.) The proportion of boys and girls with intelligence quotients between 50 and 70 was the same as that reported for the submormal boys and girls who had been enrolled in special classes in the public schools. (See p. 7.)

TABLE 32.—*Length of possible working period outside institutions, employment history, and intelligence quotient of boys and girls formerly in two Illinois State institutions for the feeble-minded*

Intelligence quotient and sex	Young persons formerly in 2 Illinois State institutions for the feeble-minded			
	Total	Possible working period outside institutions		
		1 year or more		Less than 1 year
		Employed	Never employed	
Total	167	134	17	16
Intelligence quotient:				
Less than 50	28	18	7	3
50, less than 70	113	95	7	11
70 or more	23	19	2	2
Not reported	3	2	1	----
Boys	118	98	6	14
Intelligence quotient:				
Less than 50	18	12	4	2
50, less than 70	79	68	1	10
70 or more	19	16	1	2
Not reported	2	2	----	----
Girls	49	36	11	2
Intelligence quotient:				
Less than 50	10	6	3	1
50, less than 70	34	27	6	1
70 or more	4	3	1	----
Not reported	1	----	1	----

More boys than girls (118 boys and 49 girls) were included in the study. This was not because there were more males than females in the institutions, but because the institutions discharged relatively fewer girls than boys and because girls do not succeed in running away so easily as boys. Most of the young persons were at least 16 years of age, and the majority were 18 when they left the institutions; most of them were in their early twenties at the time of the inquiry. (Table 33.)

TABLE 33.—*Age at time of leaving the institution of boys and girls formerly in two Illinois State institutions for the feeble-minded*

Age at time of study and sex	Young persons formerly in 2 Illinois State institutions for the feeble-minded					
	Total	Age at time of leaving institution				
		Under 14 years	14 years, under 16	16 years, under 18	18 years, under 20	20 years and over
Total	167	20	24	51	53	19
14 years, under 16	5	4	1	----	----	----
16 years, under 18	5	4	1	----	----	----
18 years, under 20	32	9	7	14	2	----
20 years, under 22	44	3	7	15	18	1
22 years and over	76	----	5	21	32	18
Age not reported	5	----	3	1	1	----
Boys	118	17	20	34	36	11
14 years, under 16	5	4	1	----	----	----
16 years, under 18	5	4	1	----	----	----
18 years, under 20	27	7	7	11	2	----
20 years, under 22	32	2	6	11	12	1
22 years and over	44	----	2	11	21	10
Age not reported	5	----	3	1	1	----
Girls	49	3	4	17	17	8
18 years, under 20	5	2	----	3	----	----
20 years, under 22	12	1	1	4	6	----
22 years and over	32	----	3	10	11	8

The great majority of the boys and girls were delinquents as well as mental defectives and were thus doubly handicapped in any attempt to earn their living; 89 (77 per cent) of the boys and 34 (70 per cent) of the girls had been brought to court on delinquency charges and either placed on probation or committed to institutions for the delinquent or to institutions for the feeble-minded at some time in their lives before the study was made.[3] (Table 34.) Although the State institutions for the feeble-minded are intended only for the care of mental defectives, among the higher-grade defectives it is apparently chiefly those who are difficult to control that are committed to these institutions. Others of the same degree of mental defect who give no trouble remain with their families in the community. The chief difference between the boys and girls who had been in institutions and those who had been enrolled in special classes in the public schools (see Part 1, p. 12) is the much higher proportion of delinquents among the institution group; 76 per cent of the former, compared with 15 per cent of the latter, had had court records for delinquency at some time in their lives and as a consequence had been put on probation or committed to institutions for defectives or delinquents.

[3] All the young persons recorded as delinquent when brought to court on delinquency charges either had been committed by the court to correctional institutions or to institutions for the feeble-minded or had been placed on probation. As in Part 1 of this study, which relates to former special-class pupils, the young persons classified as delinquent did not include those who had been merely fined or whose cases had been dismissed by the court.

TABLE 34.—*Court delinquency record and intelligence quotient of boys and girls formerly in two Illinois State institutions for the feeble-minded*

Court delinquency record and sex	Young persons formerly in 2 Illinois State institutions for the feeble-minded				
	Total	Intelligence quotient			
		Less than 50	50, less than 70	70 or more	Not reported
Total	167	28	113	23	3
No delinquency record	39	12	19	6	2
Delinquency record before entering institution	87	14	60	12	1
Delinquency record after leaving institution	3		2	1	
Delinquencies at both times	36	2	30	4	
Delinquency record not reported	2		2		
Boys	118	18	79	19	2
No delinquency record	25	9	12	3	1
Delinquency record before entering institution	58	7	39	11	1
Delinquency record after leaving institution	2		1	1	
Delinquencies at both times	31	2	25	4	
Delinquency record not reported	2		2		
Girls	49	10	34	4	1
No delinquency record	14	3	7	3	1
Delinquency record before entering institution	29	7	21	1	
Delinquency record after leaving institution	1		1		
Delinquencies at both times	5		5		

Practically all the individuals with delinquency records had been in court, some of the boys several times, before their admission to the State institutions for the feeble-minded. Thirty-seven had been committed to institutions for delinquents. Thirty-three (28 per cent) of the boys also had court records after leaving the institution. (Table 34.) The degree of intelligence seemed to have little to do with their behavior; boys and girls of all levels of intelligence, those with intelligence quotients of less than 50 and those with intelligence quotients of 70 or more, had had court records for delinquency. As is true of delinquents of juvenile-court age in general, stealing was the most common offense among the defective boys before their commitment and sex offenses among the girls. After returning from the institution, some of the boys were charged with serious offenses, including burglary and robbery; one was brought in on a charge of murder but was later acquitted. Ten girls were brought to court after leaving the institutions, four of them for sex offenses. Others who were not actually brought to court may have been sex delinquents. Girls over juvenile-court age are frequently not brought to the courts for this offense. At the time of the study 13 of the boys and 1 of the girls were in institutions for delinquents, including 5 boys in State reformatories and 2 in State prisons.

According to the records of the physical examinations given them at the time of admission to the institution, the majority of the feeble-minded boys and girls studied had no physical defects, but a few were epileptics, others were crippled in some way, and others had defective vision, speech, or hearing. (Table 35.) The extent of the difficulty of those who were crippled varied from that of a boy whose left arm was paralyzed to that of a boy who walked with a slight limp.

TABLE 35.—*Physical handicaps of boys and girls formerly in two Illinois State institutions for the feeble-minded*

Physical handicaps	Young persons formerly in 2 Illinois State institutions for the feeble-minded		
	Total	Boys	Girls
Total	167	118	49
No defects recorded	123	86	37
Defective vision	12	8	4
Defective speech	8	8	
Crippled	5	3	2
Defective hearing	3	2	1
Epilepsy	6	4	2
Defective speech and vision	3	2	1
Defective speech and hearing	2	2	
Defective hearing and vision	1	1	
Defective speech and epilepsy	2	1	1
Defective hearing and epilepsy	1	1	
Defective vision and epilepsy	1		1

Most of the young persons included in the study had foreign-born parents of low economic status. Practically all the boys and girls were born in the United States, but the fathers of more than four-fifths of the white were foreign born. Poles, Germans or Austrians, Italians, and Russian Jews were among the varied nationalities represented. Ten boys and six girls were colored. Many of the fathers were in unskilled or semiskilled occupations; some were skilled mechanics, and a few were in clerical or professional occupations. A background of poverty, immorality, and disease was common. More than seven-eighths of the families were known to social agencies, and 28 per cent were known to relief agencies. A considerable number of the boys and girls at one time had been declared dependent by the court or had been placed by the juvenile court or children's agencies in foster homes or institutions for dependent children. According to institution records, mental defect, insanity, or epilepsy was recorded for a parent, brother or sister in 59 of the 106 families for which the information was obtained.

A great many of the boys and girls had left the institutions against the advice of the institutional officials. The majority had been in State institutions for the feeble-minded at least one year, a few seven or eight years. Nearly one-third, however, had stayed less than a year. Only 29 of the 167 individuals had been discharged either informally by the institution or officially by court order;[4] 64 had run away; and 74 were classified as paroled.[5] A number of those discharged by court order had been released contrary to the recommendation of the institutional authorities, and also a number of those on parole or

[4] Since the commitment law of July 1, 1915, discharge from the institution may be obtained only by order of the court of commitment (for persons committed to the institution) or through habeas corpus proceedings. (Ill., Smith-Hurd Rev. Stat. 1925, ch. 23, sec. 359.) Up to 1926 (that is, during the period covered by the present study), the superintendent made a practice of discharging without court order persons admitted to the institution by application before the act of 1915 became effective. Since September, 1926, when the attorney general ruled against this procedure, the institution management has required a court order for the discharge of all inmates.

[5] No specific legal provision has been made for parole. The law allows an annual leave of absence of not more than 2 weeks. (Ill., Smith-Hurd Rev. Stat. 1925, ch. 23, 23c. 360.) According to information received from the institution in August, 1930, many of the courts have adopted the method of issuing what is called a "variation order" paroling a patient either for a definite period or for an indefinite period or until further order of the court. Some courts, however, rule that there is no legal justification for this procedure and do not issue such orders.

vacation had remained outside the institution against advice. None of those included in the study had received any supervision from the institution after leaving. Up to the spring of 1926, when the study was made, neither institution had any means of supervising patients who had left the institutions on vacation; at that time a social worker was added to the staff of the Lincoln State School and Colony. Twenty-one of those included in the study were supervised to some extent by the probation staff of the juvenile court or by other social-agency workers; the majority were dependent on what supervision their relatives and friends could give them. With a few exceptions they had no assistance from any agency or employment office in finding suitable work; they were left either to their own resources or to the help of their relatives in getting employment.

In view of the fact that the officials of the institutions did not consider it desirable for many of the young persons to live outside these institutions, it is not suprising that, although many of them found work which they could do, a considerable number had drifted back into institutions or had been seriously delinquent by the time the study was made. (See cases 15, 16, 17, 21.) Of the 167 who were investigated, 69 were employed at the time of inquiry, 49 were unemployed (including a number of girls who had married), 26 were in institutions, and 23 had died or could not be located.

EMPLOYMENT AFTER LEAVING THE INSTITUTIONS

One hundred and thirty-four boys and girls (89 per cent of those who had been out of institutions for as long as one year and were of working age) had had some employment. Only a few had been employed by relatives or friends. Those who worked for relatives but received no compensation were not regarded as employed in this study.

The few boys and girls who had been out of institutions for at least a year and had not been gainfully employed were not necessarily the most defective mentally, although several had intelligence quotients of less than 45. Several epileptics with relatively high intelligence quotients were found among those who had never worked. Relatively more girls than boys had no employment, probably because some of the girls were kept at home to help with the housework or had married soon after leaving the institutions.

LENGTH OF WORK HISTORY AND NUMBER OF POSITIONS

Table 36 shows the length of time that the boys and girls had been outside institutions and had had an opportunity to work. The girls who had married after leaving the institutions are not included in the table because their work history may have been subject to interruptions not experienced by girls who remained unmarried. The average length of the possible working period was nearly four years (45 months) and was about the same for boys and for girls. During this time the boys reported an average of five positions, the girls an average of three positions.[6] Twelve boys with a possible working period

[6] The term "position" as distinguished from the term "job" is used in this report to mean a period of continuous employment with one employer regardless of the number of changes in occupation. Little difference appeared, however, between the number of positions and the number of jobs or occupations that these boys and girls held as few changes of occupation with one employer had been made.

of one year but less than two years averaged 3 positions, 27 boys with a possible working period of two years but less than four years averaged 5 positions, and 32 boys with a possible working period of four years or more averaged 6.2 positions. Some boys had had but one position; one boy in the 6½ years since he left the institution had held 30 positions. (See case 19). The boys in the present study averaged somewhat fewer positions (5) than the boys from the special classes (6). The difference in the length of the work histories of the two groups—an average of not quite four years for the boys from the institutions, compared with 4¾ years for the boys from the special classes—partly accounts for the difference in the number of positions.

TABLE 36.—*Length of possible working period of one year or more outside institutions and number of positions held during this period by boys and girls (unmarried) formerly in two Illinois State institutions for the feeble-minded*

Length of possible working period of 1 year or more outside institutions and sex	Boys and girls (unmarried) formerly in 2 Illinois State institutions for the feeble-minded								
	Total	Number of positions							
		1	2	3	4, less than 6	6, less than 8	8, less than 10	10 or more	Not reported
Boys	98	14	9	5	18	6	5	14	27
1 year	15	5	2	2	3				3
2 years	28	3	4	1	4	3	2	1	10
3 years	9	1	1	1	2	1	1	2	
4 years	18	3	2	1	6	1		4	1
5 years	5	2			1		1	1	
6 years	6				1	1		2	2
7 years or more	10				1		1	4	4
Not reported	7								7
Girls (unmarried)	16	6	2	3	2		2		1
1 year	4	2	1				1		
2 years	3	2			1				
3 years	3			1	1		1		
4 years	1	1							
5 years	3			2					1
6 years	1	1							
7 years or more	1		1						

UNEMPLOYMENT

Unemployment was an important factor in the work experience of boys and girls of subnormal mentality, among those who had been in institutions as well as among those who had been pupils in special classes. Information as to the amount of unemployment was obtained for about three-fifths of the boys and girls who had been in institutions. About one-fourth of these boys reporting on unemployment had been out of work as little as one-tenth of the time. (Table 37.) The amount of unemployment reported for these institution boys is similar to that reported for the boys who had been in special classes, 29 per cent of whom had been unemployed for less than one-tenth of their possible work histories. About one-third of the boys who had been in institutions and 30 per cent of those from special classes had been out of work between 10 and 30 per cent of the time. As many of the 39 institution boys for whom unemployment was not reported are believed to have been irregular workers, it is probable, however, although it can not be proved from the avail-

able figures, that boys from the institutions had had more unemployment than those from the special classes.

TABLE 37.—*Percentage of unemployment and intelligence quotient of boys and girls (unmarried) employed one year or more outside institutions formerly in two Illinois State institutions for the feeble-minded*

Percentage of unemployment and sex	Boys and girls (unmarried) formerly in 2 Illinois State institutions for the feeble-minded				
	Total	Intelligence quotient			
		Less than 50	50, less than 70	70 or more	Not reported
Boys	98	12	68	16	2
None	2		2		
Less than 10 per cent	15	2	7	5	1
10 per cent, less than 30	21	4	14	2	1
30 per cent, less than 50	6		4	2	
50 per cent and more	15	2	11	2	
Not reported	39	4	30	5	
Girls (unmarried)	16	2	14		
None	2		2		
Less than 10 per cent	5	1	4		
10 per cent, less than 30					
30 per cent, less than 50	1		1		
50 per cent and more	6	1	5		
Not reported	2		2		

In several studies that the Children's Bureau has made of employed minors of unselected mentality and in a similar study made in Cincinnati, it has been found that unemployment is not a very important problem among young industrial workers.[7] It was also found in some of these studies that the amount of unemployment tends to decrease with the length of the working period.[8] Although the mentally deficient boys and girls were, on the whole, older and had had a longer working period, 63 per cent of 861 boys included in the study of employed minors attending the Milwaukee continuation school, who were at least 16 years of age and had a work history of a year or more, and 77 per cent of the 711 boys attending the continuation school in Newark, N. J., all of whom were under 16 and some of whom had work histories of less than one year, had been unemployed less than one-tenth of the time.[9]

Some of the boys and girls in the present study had had great difficulty in finding work and several, failing to succeed at the one or two jobs they did find, did not attempt to work any more, but either stayed at home or were placed in institutions. For example, a boy who had proved unsatisfactory in the one job he had found worked for only six weeks in five years; a girl who had been employed by friends just seven weeks was thereafter kept at home by her mother;

[7] The Working Children of Boston—A study of child labor under a modern system of legal regulation, by Helen Sumner Woodbury, Ph. D., p. 191 (U. S. Children's Bureau Publication No. 89, Washington, 1922); Industrial Instability of Child Workers—A study of employment-certificate records in Connecticut, by Robert Morse Woodbury, Ph. D., pp. 26–35 (U. S. Children's Bureau Publication No. 74, Washington, 1920); Child Labor in New Jersey—Part 3, The Working Children of Newark and Paterson, N. J., by Nettie P. McGill, p. 36 (U. S. Children's Bureau Publication No. 199, Washington, 1931); An Experimental Study of Children at Work and in School Between the Ages of 14 and 18 Years, by Helen Woolley, Ph. D., pp. 558–562 (New York, 1926); Employed Minors in Milwaukee—Unpublished figures.

[8] Ibid, except the Working Children of Boston not included.

[9] The Working Children of Newark and Paterson, Table VIII, p. 83.

another girl who had held a job soon after she came out of the institution had had an accident and did not attempt to find another job in the 10 months between this time and the date she was married. Others, however, had worked steadily since they first found work up to the date of the study; 11 boys and 4 girls who were employed when the study was made had worked steadily for the same employer since they had first found employment. (See cases 2, 5, 9.)

To judge from the greater amount of unemployment among the workers of subnormal intelligence than among workers of unselected intelligence it would appear that mental defect is closely associated with unemployment. Yet variations in mental ability within the group of subnormal boys and girls in the present study, as in the study of work histories of young persons from the special classes, appeared to bear little relation to the regularity with which they worked. (Table 37.) Young persons of the lower mental levels were represented both among those who had been employed for short and for long periods of time, and, on the other hand, persons of the higher mental levels were also found both among the steady and the unsteady workers. (For case histories of young persons with low intelligence quotients see cases 1, 2, 3, 13, 22, 23, 24, and 25; for histories of those with relatively high intelligence quotients see cases 9, 10, 17, and 21.)

Behavior difficulties were, no doubt, one of the principal factors in the unemployment of the boys and girls in the present study and outweighed slight differences in mental ability. (Cases 15, 16, 17, 19, and 21.) Other personal characteristics and physical handicaps were probably also closely related to unemployment, but complete information on these subjects was not available. The only way of measuring behavior in this study was through court records. Only 3 of the 38 boys and none of the 7 girls who had worked as much as 70 per cent of their possible working time had court records for delinquency after leaving the institutions. Only 1 of the 14 boys and none of the 6 girls who had worked as long as a year in the position that they held at the time of the inquiry had been delinquent. On the other hand, most of those who had been brought to court after leaving the institutions had been out of work for long periods or did not report the length of time they had worked. In a study of 321 former pupils of special classes made by the National Committee for Mental Hygiene, individuals who were handicapped by personality difficulties held their positions only short periods, whereas those holding positions for two or three years were in large measure free from serious personality difficulties.[10] In a study of the parole work of the State institution for the feeble-minded at Letchworth Village, N. Y., a close relation was found between personality make-up and maladaptation in the community.[11]

In an investigation of 136 men and women whose homes were in Erie County, N. Y., and who had been discharged from the Rome State school between 1905 and 1924, in which only a small number were found to have been successfully employed, personality difficulties

[10] Anderson, V. V., M. D.: A Study of the Careers of 321 Feeble-minded Persons Who Have Been in the Special Classes and Are Now Out in the Community. Published in Proceedings of the Forty-sixth Session of the American Association for the Study of the Feeble-minded, pp. 138-149. St. Louis, 1922.

[11] Potter, H. W., M. D., and Crystal L. McCollister: A Résumé of Parole Work at Letchworth Village. Published in Proceedings of the Fiftieth Session of the American Association for the Study of the Feeble-minded, pp. 165-186. Toronto, 1926.

and character defects were numerous.[12] Thirty-three of 88 men and 10 of 48 women had had criminal records after leaving the institution, a larger proportion than of young persons in the present study who had been brought to court since leaving the institutions.[13] In comparing the findings of the Rome and the present studies it should be noted that some persons of very inferior intelligence—with mental ages as low as three years—were included in the Rome study; in the present study, on the contrary, both idiots and low-grade imbeciles were excluded. (See p. 70.)

OCCUPATIONS

At the time the boys and girls first obtained work after leaving the institutions, most of them were at least 16 years of age, and the majority were at least 18 years. (Table 38.) Most of them, therefore, were physically able to do the work of adults. Errand and messenger work, in which many juvenile workers are employed, was not open to many of them.

TABLE 38.—*Age at beginning first job after leaving institution of boys and girls employed one year or more outside institutions formerly in two Illinois State institutions for the feeble-minded*

Age at beginning first job after leaving institution	Young persons formerly in 2 Illinois State institutions for the feeble-minded		
	Total	Boys	Girls
Total	134	98	36
Under 16 years	15	14	1
16 years, under 18	39	30	9
18 years, under 20	51	35	16
20 years and over	21	12	9
Not reported	8	7	1

Like the former pupils of special classes and as has been found in other studies [14] of boys and girls of defective mentality, these boys and girls were employed not only in the simplest kinds of manual work but in semiskilled factory work; a few boys were apprentices or learners in the skilled trades. Forty-seven (about one-half) of the boys who gave information about their first jobs after leaving the institutions were in occupations classified by the Census Bureau as manufacturing and mechanical; most of these were semiskilled operatives in factories or were laborers. A few were helpers to skilled mechanics, 3 were apprentices, and 2 were learning a trade. One boy, an apprentice to a lather, afterwards became a journeyman (case 8); the other two apprentices remained but a short time in their

[12] Town, Clara H., and Grace E. Hill: How the Feeble-minded Live in the Community—A report of a social investigation of the Erie County feeble-minded discharged from the Rome State school, 1905–1924, pp. 44–46.

[13] Ibid.; figures computed from tables, pp. 70–77.

[14] A Study of the Careers of 321 Feeble-minded persons, pp. 138–149; Fernald, Walter E.: After-care Study of Patients Discharged from Waverly for a Period of 25 years, p. 6; Matthews, Mabel A.: One Hundred Institutionally Trained Male Defectives in the Community under Supervision, pp. 3–6 (New York, 1922); Carpenter, Mary S.: A Study of the Occupations of 207 Subnormal Girls after Leaving School, pp. 23–27 (Vocational Education Department, School of Education, University of Michigan Special Studies No. 2, Ann Arbor, 1925); Woolley, Helen T., and Hornell Hart: Feeble-minded Ex-School Children. (Helen S. Trounstine Foundation Studies, vol. 1, No. 7 (April, 1921), p. 256).

jobs. One boy was employed by a relative to help paint a house, and another was learning to repair automobiles in a garage (case 5). Among the rest of the boys were a few automobile truck drivers, some helpers on trucks or teams, and a few delivery boys. Others were laborers of various kinds or were in personal and domestic service, such as washing dishes in restaurants, cleaning floors, or doing chores for private families (cases 1, 19, 23). Only 1 did sales work, selling gas and oil in a filling station, and only 1 did clerical work—a shipping clerk (case 9). The study of working minors of unselected mentality in Milwaukee showed that although a large proportion of boys who entered employment after they were 16 were also employed in manufacturing and mechanical industries in their first jobs one-fifth, a considerable proportion, were in sales work or in clerical work (other than errand and messenger work).[15]

The type of work in which the boys were employed at the time of the study or when they last worked was much the same as at the time when they first left the institutions, from one to eight years before. Eight were still employed at the same occupations that they had entered when leaving the institutions. The occupations in which they were last employed are shown in the Tabular summary of work histories, p. 104, and illustrated in the case histories. The occupations in which the institution boys and the special-class boys were employed differed little; 52 per cent of the former and 55 per cent of the latter were employed in manufacturing and mechanical industries in their last positions, chiefly as semiskilled factory operatives or as laborers, though a small number in both groups were occupied in skilled trades. A considerable proportion of the boys, both those from institutions and those from special classes, were teamsters, motor-car drivers, or helpers on trucks and delivery wagons, but less than 5 per cent of either group were in clerical or sales work.

Most of the girls were operatives in factories or did housework for private families, both at the time they left the institutions and at the time of the study. Twenty-one of the 35 for whom the occupations were reported were employed at the time of the study or had been last employed in factories, usually at such simple jobs as folding and stacking paper boxes, wrapping candy, packing biscuits, and stoning dates; a few did more difficult work, such as operating power machines. (See Tabular summary of work histories, p. 104.) None was employed in clerical work at the time of the study and only 3 were in stores—1 as a salesgirl in a 5-and-10 cent store and 1 running errands for her mother in the family grocery store; the kind of work the other did was not learned.

The number of boys and girls included in the study is too small and the range of their occupations too varied to show whether or not the young persons of relatively high intelligence held the more skilled jobs. A number of boys with intelligence quotients of 70 or more, however, were employed at the time of the study in occupations that required a degree of skill, such as boilermaker's apprentice, punch-press operator, truck or taxi drivers, and shipping clerk. On the other hand, several boys with intelligence quotients between 50 and 70 were operatives of power machines, skilled mechanics, or motor-car drivers, and had held their jobs for several months or even years at a time. (See Tabular summary of work histories, p. 104, and cases 5, 6, 8.)

[15] Unpublished figures.

The industrial training given some of the boys and girls in the institutions apparently had helped them but little in their work. About one-third had been in industrial classes or shops at the Lincoln or Dixon institution. Some of the boys had worked on various jobs in the carpentry, paint, rug, brush, shoe, or machine shops, or in the bakery; the girls, in the laundry or in the sewing or dressmaking room. All had been employed in various chores about the institution. Although many of them had had no vocational training it may be that the habit of work formed in the institution helped them in their work after their return home. Only three boys were reported to have found work in which they had been trained. One of the boys (intelligence quotient 53) who had been in the paint shop at the institution had had various jobs at painting after he left, but so far as was known he had not worked more than three weeks at a time for any employer and was apparently an unsatisfactory worker. Another boy (intelligence quotient 69) who had worked with the tinner at the institution doing gutter and roofing work had been employed for seven months at the time of the study as a helper in sheet-metal work and was doing well. Another boy (intelligence quotient 62) who had played the cornet in the institution band was reported to have obtained work in this occupation after leaving the institution.

DURATION OF JOBS

The majority of the jobs were of short duration—from a few days or weeks to a few months. The time that a boy or girl stayed in one job or occupation in most cases also represents the length of time they worked consecutively for one employer, because transferring from one occupation to another while working with the same employer was not common. The boys reported the length of time they had been employed in 390 jobs which had terminated before the date of the study and the girls (including both girls who were single and those who had married) reported the duration of 98 jobs. (Table 39.) The median duration of the boys' jobs was 2.3 months, that of the girls 2.4 months. The median duration of the 3,988 terminated jobs of boys who had been pupils in the special classes of the public schools was 2.5 months, very nearly the same as the duration of jobs of boys who had been in institutions.

TABLE 39.—*Duration of terminated and unterminated jobs held by boys and girls formerly in two Illinois State institutions for the feeble-minded*

Duration of job	Jobs held by boys and girls formerly in 2 Illinois State institutions for the feeble-minded					
	Boys			Girls		
	Total	Terminated	Unterminated	Total	Terminated	Unterminated
Total	501	443	58	124	113	11
Less than 1 month	133	124	9	31	29	2
1 month, less than 3	119	107	12	29	29	----
3 months, less than 6	86	76	10	18	17	1
6 months, less than 12	50	43	7	9	8	1
12 months, less than 2 years	32	26	6	15	14	1
2 years, less than 3	15	10	5	3	----	3
3 years or more	7	4	3	3	1	2
Not reported	59	53	6	16	15	1

Twenty-nine of 63 boys who reported the longest time they had ever worked at one job had held that job for at least a year. Nine girls had also worked at least a year in one occupation. Eleven other boys and 5 girls had been employed at least a year and were still employed at the time the study was made. The proportion of boys included in this study who held one job for at least a year was somewhat smaller, however, than the proportion of boys in the study of former students of special classes, more than two-thirds of whom had kept their longest job at least a year. Most of those who had worked a year at one job were numbered among the steady workers with little unemployment and among those who had not been brought to court for delinquency after leaving the institutions (see cases 1–3, 5–13), but a few had been out of work a good deal of the time or the length of their unemployment was not known and a few had delinquency records. (See case 4.) Several were working for employers who were interested in them (see cases 3, 5, 9); but so far as was known most of those who had worked at least a year in one occupation had no especial assistance or supervision in their work. For the varied kind of work they did and the wide range of their intelligence quotients, see Tabular summary, p. 104.

WAGES

At the time of the study many of the boys were earning wages common to unskilled and semiskilled occupations, wages adequate in many cases to enable them to be self-supporting provided they worked steadily. A few boys were earning the relatively high wages of skilled mechanics. The median weekly wage for the 70 boys who reported cash wages, most of whom were employed in Chicago, was $25. (Table 40.) This was not very different from the median weekly wage of former special-class boys, which ranged from $19 for Cincinnati boys to $27 for Detroit boys. Several boys who worked for relatives or friends or were in the Army or the Coast Guard received maintenance as well as cash wages. Among the highest wages reported were those of a lather (intelligence quotient 60) who earned $52 a week, and a painter (intelligence quotient 60) who earned $43 a week. The girls, as would be expected, earned much lower wages than the boys.

Of the 55 boys who reported wages of $20 or more a week only 26 were known to have worked the greater part of the time (that is, as much as 70 per cent of the period since leaving the institutions); 16 had worked less than this, and for 13 the amount of time worked was not reported. (See Tabular summary of work histories, Appendix, p. 104.) In a study made of persons discharged from the Rome State School for the Feeble-minded, who on the whole had been out of the institution longer and were older than those in the present study, 27 of 88 men from Erie County were regarded as self-supporting, although not necessarily as successful in their social adjustment.[16] According to a study of cases discharged from the Letchworth Village State Institution 186 (48 per cent) of 387 males were reported to be self-supporting.[17] In both these studies some persons of very inferior mentality were included, although those classified as idiots are excluded

[16] How the Feeble-minded Live in the Community; a report of a social investigation of the Erie County feeble-minded discharged from the Rome State School, 1905–1924, p. 33.

[17] Storrs, Harry C., M. D.: A Report on an Investigation made of Cases Discharged from Letchworth Village, published in Proceedings of the Fifty-third Session of the American Association for the Study of the Feeble-minded, pp. 220–232. Atlanta, 1929.

from the Letchworth Village figures. However, the persons from these institutions can not be compared with the individuals included in the present study, as the wages and length of time employed of those classified as self-supporting are not given.

TABLE 40.—*Wage in last position of boys and girls employed one year or more outside institutions formerly in two Illinois State institutions for the feeble-minded*

Wage in last position	Young persons formerly in 2 Illinois State institutions for the feeble-minded		
	Total	Boys	Girls
Total	134	98	36
Receiving cash wage only	93	70	23
Less than $10	4		4
$10, less than $12	2		2
$12, less than $14	7	3	4
$14, less than $16	10	2	8
$16, less than $18	7	4	3
$18, less than $20	6	6	
$20, less than $24	19	17	2
$24, less than $28	17	17	
$28, less than $32	7	7	
$32 and more	14	14	
Cash and other compensation	12	4	8
Other compensation only	3	2	1
Not reported	26	22	4

The majority of the boys and girls of the present study earned more in their last jobs than when they first started to work. Forty-eight of 59 boys, and 12 of 24 girls, for whom information on this point was obtained reported an increase; the wages of 22 boys had been raised as much as $10 a week. An increase in the boys' wages, however, does not necessarily indicate that they were successful, because some of the boys were under 18 years of age when they entered employment and would be expected to earn more when they were older. The increase in wages also reflects to some extent the general increase in wages in the afterwar period, 1919–1925,[18] which was covered by the study.

ACCIDENTS WHILE EMPLOYED

Some of the boys and girls had been injured in the course of their employment. Several of these worked on power machines. Among eight young persons who at one time or another operated punch presses, two met with accidents while working on them. Employment on these machines is prohibited for minors under 16 under the Illinois child labor law.[19] A 17-year-old girl (intelligence quotient 61), after working for six months, cut her finger on the machine and was incapacitated for work for a month; a 19-year-old boy (intelligence quotient 66) cut off his right index finger on the first day of his employment. A 15-year-old boy (intelligence quotient 72) was employed on an emery wheel in violation of the Illinois child labor law,

[18] For figures showing increases in union wage rates in Chicago during this period, see Union Scale of Wages and Hours of Labor, pp. 15, 35–38 (U. S. Bureau of Labor Statistics Bulletin No. 482. Washington, 1929).

[19] Ill., Laws of 1917, p. 111.

and his fingers were slightly injured. Still another boy (intelligence quotient 57) who had worked on a power press in a cardboard factory—the nature of the machine could not be ascertained—had severely injured the fingers of both hands and was incapacitated for work for two months. A girl (intelligence quotient 42) ran a punch press by hand power, and after working about three weeks cut her index finger and received three days' compensation. Two of the 11 boys who at some time had driven trucks or taxicabs had a record of accidents while driving and were consequently discharged.

SUCCESS IN JOBS

An attempt was made to learn through the employers whether or not the boys and girls had done satisfactory work. Complete information as to all jobs held by a boy or girl could be obtained for only a few of those included in the study, but information was obtained concerning at least some of the jobs most of them held. The boys were said to have been satisfactory in 143 of 201 jobs about which reports were obtained and the girls in 32 of 45 jobs. The length of time that some of the boys and girls had held at least one of their jobs and the quite general increase in wages between first and last jobs would also indicate that they had been successful in some jobs.

They were reported as satisfactory in a wide variety of occupations. The boys were successful workers not only as laborers on farms and in such work as loading freight, shoveling coal, pushing trucks (in a factory), cleaning floors, and as helpers to skilled mechanics, but also in various kinds of repetitive factory occupations, such as packing canned goods and other articles, clamping wires to shades in a lamp factory, assembling parts in electrical-supply and metal manufacturing establishments, and cleaning heels in a shoe factory. Several boys successfully operated punch and drill presses and other metal-working machines, although others of approximately the same intelligence levels were unsuccessful in this work. One boy who had enlisted in the Coast Guard had a good record; two boys who were learning trades, an auto mechanic and a carpenter, were also successful. (See cases 5 and 8, pp. 87–88.) The girls were found to be satisfactory not only in domestic service in private families and in restaurants but also in miscellaneous factory occupations, such as assembling parts of toys, inspecting jar covers, cutting and packing sausages, pasting labels on cans of paint, and stacking leaves of books. Several had operated simple machines satisfactorily; one had operated a machine that made leather cups and another had operated a tag-cutting machine. Another girl fed a mangle in a laundry.

From employers' statements and from the statements of the young persons themselves or of their relatives, it was learned that 31 boys and 7 girls had been discharged from at least one of their jobs. The proportion of boys who had been discharged was similar to that reported for boys from special classes, two-fifths of whom had been discharged at least once. Some of the boys and girls had been discharged because of behavior difficulties, absenteeism, loafing on the job, intoxication, or other reasons not necessarily arising from mental defect. One boy, who drove a taxicab, was discharged because it was discovered that he had been an inmate of an institution for the feeble-minded; another boy, also a taxicab driver, was discharged

because he had refused to take passengers, and it was found that he had a police record.

Four girls and 15 boys had been discharged from at least one of their jobs for incompetency or slowness. A girl (intelligence quotient 61) who tried to learn telephone operating was discharged after 2 weeks for inefficiency (case 27); another girl (intelligence quotient 56) was found to be unable to sort and mark sizes on lifts in a shoe factory and was discharged. Several of the boys had been employed on power machines. One boy (intelligence quotient 65) had held two jobs operating a drill press; the first time he kept the job for two months before he was discharged for carelessness; the second time, after three weeks, he was discharged for incompetency. Another boy (intelligence quotient 63) was discharged after a month's trial grinding valves (case 26); still another boy (with the relatively high intelligence quotient of 77) had twice been employed as punch-press operator, each time being discharged in about a month because he was too slow. Other types of semiskilled jobs from which boys were dismissed for incompetency or slowness were rivet heating, painting, and assembling work. Several boys employed in comparatively simple jobs were discharged for incompetency. One boy (intelligence quotient 61), who had also been unsatisfactory at painting, was discharged after three months in a bakery where he had been employed to clean pans, because "he could not learn anything"; another boy (intelligence quotient 58) was let go after a few days' trial as delivery boy because he could not find addresses and was slow. Still another boy (intelligence quotient 62), employed to clean floors in a large department store, was discharged after only two days' trial. Other boys, however, of similar intelligence levels, were found satisfactory in such work as cleaning floors. (See cases 1 and 19.)

CASES ILLUSTRATING WORK EXPERIENCES

The following case histories illustrate the work experiences of the institution boys and girls.

Cases 1 to 14 illustrate the great variety of work in which subnormal persons may be successfully employed, especially when they are carefully supervised, in spite of some behavior difficulties and sometimes in spite of an unfavorable social background. These work experiences also show that among the most steady and reliable workers were some of those whose intelligence quotients were relatively low. All but 2 of these 14 young persons had been employed at least 80 per cent of the time and had worked steadily in a few positions; one boy (case 6) had worked between 70 and 80 per cent of the time and may also be regarded as a steady worker. The length of time that the remaining boy (case 14) had worked is not known, but his history shows that under the influence of supervisory care of relatives he had made a good adjustment. The results of supervision by relatives and interested employers are also illustrated in cases 2, 3, 5, and 9.

Cases 15 to 27 illustrate unsuccessful work experiences. The failure of boys and girls with delinquent tendencies and other defects in character to get and keep regular employment is brought out in cases 15 to 21. In cases 22 to 27 mental defect was apparently the chief cause of unemployment, although personal peculiarities, lack of supervision, and industrial conditions were other factors. The desir-

ability of vocational advice and assistance in getting work suitable for mentally defective persons is brought out in cases 25, 26, and 27. Most of these cases show the need either of custodial care or of close follow-up and supervision for these children after they leave the institutions for the feeble-minded.

Case 1.—Jack, one of the five boys with a history of employment whose intelligence quotient was less than 50 (Goddard revision), was a steady worker. He had been employed in four different kinds of unskilled and semiskilled work between 80 and 90 per cent of a 6-year period.

Jack's home conditions had been far from satisfactory before his admission to the institution at the age of 16. Both his parents were heavy drinkers; his father finally had committed suicide, and his mother had been sentenced to the house of correction for drunkenness. Jack had no court record for delinquency, but the teacher of a special class in which he had been enrolled had complained of his violent outbursts of temper. When 19 years of age, after nearly 3½ years in the institution, he left on vacation and from that time on lived with his stepsister, with whom his mother, apparently reformed, made her home. The institution officials were opposed to his release.

Shortly after leaving the institution, he obtained work through the efforts of relatives as a laborer in a candy factory, cleaning floors and washing windows in the packing department. He remained in this position for five years, beginning at $18 a week and receiving $21 a week at the time he left. After a year's period he had saved $300. His employer said that he was a satisfactory and dependable worker and left because of illness. Jack was out of work about six months. A friend of the family, who managed an office building, then employed him for three months during the summer to run elevators as substitute for those on vacation. The following winter he was employed steadily as helper, handling tools, in a plate-glass factory, a job found for him by his brother. The next summer he left the plate-glass factory to return to his job as elevator operator. Although running an elevator can not be considered suitable work for one of his low mentality, apparently his employer found him satisfactory. At the time of the study he had been employed at this job for two months and was receiving $28 a week.

Case 2.—Edward, another boy whose intelligence quotient [20] was less than 50, had been steadily employed. When he left the institution, with the approval of the authorities after a stay of five years, he was 19 years of age. He had never been a behavior problem but was dull in appearance and could mutter only a few syllables and grin when interviewed by the Children's Bureau representative. At least partly through the efforts of his relatives, his industrial adjustment had been successful and he had given no trouble at home. He had had a great deal of difficulty in finding work when he first returned home. The employment bureau to which a social agency had sent him said it could find nothing for him because of his mental defect. Finally, five months after he left the institution, his brother-in-law obtained a job for him at a large meat-packing plant in which he was employed. Edward's mother took him to work for the first few days, and his brother-in-law looked after him in the shop. After leaving work in the afternoons, the boy went directly home and stayed in the house until his mother returned from her work. Outside of working hours he went nowhere unless accompanied by his mother. From the day he first went to work to the day he was visited, nearly 3½ years later, the boy had held the same job, that of laborer, opening and shutting refrigerator doors. He was said by his employer to be a very regular worker, never missing a day. His wages had been raised at the time of a general raise in the plant, from $15 to $20 a week.

Case 3.—Albert, whose intelligence quotient was also less than 50, had worked most of the four years after leaving the State institution as helper on a coal truck. He came from a comfortable home; his father, who was dead at the time of the boy's commitment to the institution, had been a policeman. Albert had been enrolled in a special class in the public school but had left school when 10 years of age, and for the seven following years had stayed at home. When he was 17 years of age he was brought into court for "bumming" and shortly afterward was committed to the Lincoln State Institution. Here he remained two years.

At the time of his return from the institution he was 19 years of age. He was large and strong physically, but he talked indistinctly and unless carefully

[20] Unless otherwise stated, the test used was the Stanford revision of the Binet-Simon test.

watched was slovenly in appearance. He found work almost immediately with a coal and building-material dealer, which he kept until within three weeks of the date of the study, in spite of a habit of disappearing for several days at a time. His employer, who had become interested in him, said that he could find his way about the city alone and that, although he worked slowly, he was capable of acting as helper to the driver of the truck delivering coal. After the death of his mother his employer allowed him to sleep in a room belonging to the company, bought his clothes, and saw to it that they were washed and mended. He paid him at the rate of $3 a day, but gave him only $1 a day for meals and tobacco.

Case 4.—Donald (intelligence quotient 53), one of several negro boys included in the study, worked regularly at various kinds of factory work during the 4½ years after his discharge from the State institution. He had come to Chicago with his parents from Alabama, where he had attended school until he was 14 years of age, reaching, according to his statement, the fifth grade. When 17 years of age, he was picked up by police in a Chicago poolroom, arrested for carrying a gun, and finally committed to the Lincoln State Institution for the Feeble-minded. He stayed at the institution only a few months before he was discharged.

After his return he continued to be delinquent and was brought before the boys' court several times. Arrested for implication in a holdup in which a man had been killed, he was kept in jail for six months before he was brought to trial and acquitted.

In spite of these delinquencies, Donald lost practically no time from work except the period during which he was in jail. On his release from Lincoln he obtained a job immediately, returning to the woodworking concern where he had been employed before going to the institution. He remained with this concern for more than three years, until he was put into jail. He was employed for about a year at the ripsaw machine, taking away boards, and for another year fed a picture-frame-molding machine. He was then tried out operating a ripsaw machine. The foreman said that he had tried Donald on various jobs in the factory and that the boy had not made much progress in learning to operate the ripsaw—a job in which considerable time is required to become proficient—before he left. Donald's wages in this concern had been raised from $20 to $25 a week. After his acquittal and return home he found another job in a lamp factory. Here he painted and sprayed lamps. At the time of the interview he had been employed in the same factory for more than a year and was earning $24 a week.

Case 5.—Chester (intelligence quotient 54) was an automobile mechanic, one of the few skilled workers found. He had had but one position and had been employed practically the whole time since he ran away from the institution.

Before his commitment to the State institution for the feeble-minded, Chester's home surroundings had not been favorable. His parents and other members of the family quarreled frequently, and his father had finally died in an institution for the insane. His mother, according to the records of a relief agency that had formerly aided the family, was crippled and at one time used to sit in a big chair with a whip to discipline the children. When Chester was 17 years of age he was brought to court on a charge of raping an 8-year-old girl. He was sent to the Lincoln institution and remained there two years.

Chester had had two positions before going to the institution, driving a wagon for a junk collector and working in a stable caring for horses. About two weeks after his return a friend of his brother employed him in a small automobile repair shop and taught him to clean and repair cars. At the time of the study, about 2½ years later, Chester had become a skilled automobile mechanic, and his pay had been raised from $22 to $30 a week. His employer stated that he was slow but never forgot what he learned and had deft fingers. He apparently had no behavior difficulties after returning from the institution. He had left his own home several times on account of the family quarrels and stayed at his employer's home. At the time of the study, his mother having died and his home having broken up, he had lived with his employer six months. His employer said that he was as fond of Chester as of his own children, and that on account of his mental defect he supervised him more carefully than his own boys.

Case 6.—During the four years and two months after Jacob (intelligence quotient 57) escaped from the Dixon institution at the age of 18, he worked for three employers and was employed about 70 per cent of the time; the jobs were either in garages or driving automobiles.

Jacob was of Russian Jewish parentage. His father was a salesman, and his mother, after obtaining a divorce about the time of the boy's commitment, supported herself and a daughter by working in a factory. Jacob had been in

the juvenile court and was regarded as a serious sex delinquent before he was committed to Lincoln at the age of 16. After a few months there he was transferred to the Dixon State institution, and a vacation home was refused him on the ground that he was "dangerous." After a year at Dixon he ran away and returned home to live with his mother. As far as could be learned he was not delinquent after his return.

Jacob's first job, which he got through his own efforts, was night man, receiving cars in a garage; occasionally he drove the cars about the city on errands. He worked in the same garage at three different times three or four months at a time. He earned $19 a week, and his employer considered him a satisfactory worker. After he had been out of the institution about two years he found a better job as night man in another garage at $30 a week; his employer said that he was doing well. Here he sold gas and oil as well as parked cars. He remained at this job a year and a half and then found a position as a chauffeur. His employer was not visited, but to judge from the fact that the boy had held the position for five months at the time of the inquiry and was still employed he had proved capable of doing the work. He received $25 a week.

Case 7.—Stanley, a Polish boy (intelligence quotient 60, Goddard revision), came to the United States when 9 years of age and was committed to the institution for the feeble-minded at the age of 11. When 17 years of age, after six years in the institution, he ran away and returned to his mother's and stepfather's home. In the following four years he worked fairly regularly, as laborer or in simple factory work, being unemployed only eight months in all. His first position, which he held for nine months, consisted in taking tin sheets from a lithograph press and putting them in a rack, according to the employer a simple job requiring about an hour to learn. The boy was considered a good worker and left the job of his own accord. After a few months of unemployment he found a position loading and pushing a truck in a pottery. In nine months he left this work, saying the work was too dusty. He found another position in a gas plant shoveling coke. His fourth position, in which he was employed at the time of the interview, was in a cold-storage plant putting peanuts and vegetables into a refrigerator and unloading cars. He had done this work for about a year and a half. In his first position he made $18 a week, in the last one, $28.50. Before going to the institution the boy had a court record for incorrigibility, running away, and larceny of small sums of money from parents and neighbors. After his return he had had no court record. He was still living with his parents at the time of the study and helping toward the family support.

Case 8.—Thomas was one of the few boys to succeed in a skilled trade. According to a mental test given him shortly before leaving the institution his intelligence quotient was 60; two years before, soon after entering the institution, he had been rated with an intelligence quotient of 67. He had reached the third grade in school. His family had received relief from a social agency because his father, although a skilled worker, a lather, earned but little. His mother was insane, kept a very dirty house, and before his return from the institution was committed to a State institution for the insane. Thomas had been difficult to manage before he was sent to Lincoln at the age of 14; he had a court record for truancy and was thought to be a sex delinquent.

As soon as Thomas was discharged from the institution at the age of 18, his father got him a position as lather's apprentice for the same contractor for whom he worked. The boy worked regularly for this contractor for 2½ years. At the end of this time his father became ill, and Thomas refused to go to work without him. As he would not work regularly, he was discharged. Thomas's uncle then found him work as lather with another contractor; after he started work with this contractor he gave no more trouble. At the time of the interview he had been working steadily for 5½ months and was still employed. He had been out of work less than 10 per cent of the time since he left the institution. He received $16.50 as an apprentice when he started work; at the time of the inquiry, according to his father, he was earning $52 a week, the union rate of pay for lathers.

Case 9.—Sam (intelligence quotient 70) was one of the few boys included in the study who did clerical work. His father, a Russian Jew, was a prosperous tailor. Sam had held several jobs before being sent to the institution. When he was 18 years of age and a member of a gang of boys he was brought before the municipal court on a charge of stealing milk and was committed to the State institution for the feeble-minded. After a year in the institution he was allowed

to go home on a vacation, and he did not return. His uncle, who was the manager and owner of a wholesale grocery store, had employed him as a shipping clerk for 2½ years before he was sent to the institution and took him back upon his return. His duties were to check and fill orders and occasionally to figure bills. The orders were rechecked by another worker before they were sent out. During the 4½ years that he had been out of the institution his wages had been raised from $20 to $35 a week, and his uncle's partner in the business considered him a good, steady worker.

Case 10.—Jesse (intelligence quotient 72) had worked for three employers at various kinds of factory work and had been employed for more than 90 per cent of a 4-year period.

Jesse's home surroundings at the time of commitment were undesirable. His mother, who had been deserted by his father, was reported to have lived with six men. Jesse was brought to the juvenile court at the age of 9 for stealing milk; when he was 13 years of age the social agencies that were aiding the family thought that he needed supervision, and he was committed to the State institution for the feeble-minded. After six months there he left and returned home. There he attended regular school until after he was 14 years of age, reaching the fifth grade.

When 15 Jesse went to work. He held his first two positions for comparatively short periods, six and three months, respectively. His first work was nailing frames in a factory making reed furniture. He left after six months because of the unpleasant smells of paints, glue, and varnish. He was next employed, illegally, as he was not yet 16, on an emery wheel, grinding rough edges of iron decorations in a chandelier factory. Three months later he cut his fingers on the machine and left. He then worked for nearly three years as a crater in the shipping department of a factory in which electrical appliances were made. His wages were gradually raised from $10 to $17 a week. He had to stop work because of a serious illness. Three months later he returned to the same job, and a month later his wages were raised to $19 a week. At the time of the interview he was filling orders, picking out the appliances and placing them in crates. His employer was enthusiastic about his work, saying that he did his work thoroughly and well and that there was no reason why he should not become a shipping clerk, earning from $30 to $35 a week. At this time the boy's mother had been sent to an institution for the insane, and the boy was making his home with a married sister.

Case 11.—Walter had worked for five employers in about seven years and had been employed between 80 and 90 per cent of that time. No mental test was given him at the institution, but the psychiatrist who examined him before his admission pronounced him feeble-minded. He had been brought into the juvenile court when 13 years of age because he had killed a little girl by striking her on the head with a broom. His father, a Hungarian laborer, had deserted his family, and his mother was living with another man. Investigation showed that the supervision given the boy in the home was utterly inadequate, and he was committed to a State institution for the feeble-minded. After he had been there nearly three years and was nearly 16 years of age he was placed on probation to the juvenile court to live at home.

After returning he was a factory operative, a private in the Army, and a stevedore. His first work, doing odd jobs in a hardware factory, lasted only a few days. He then obtained a position in a lock factory, where he worked for nearly a year, first as polisher, then as grinder of the knobs on the locks at $15 a week. After four months he was promoted to assembler at $17 and later transferred to a job cleaning machines. After two months at this job he was promoted to drill-press operator at $21 a week. Having worked in this capacity for nearly five months he resigned because the work was dirty. His employer reported that he had done satisfactory work. His next position was in a blacksmith's shop, where he made $21 a week. He was laid off when work became slack. Several months later he enlisted in the United States Cavalry. After five months' service he was honorably discharged with his character recorded as very good. His fifth position was loading freight for a railroad company. He was responsible in this job for planning the order of packing the cars and for the arrangement of cars. He had to read and write orders. At the time of the interview he had held this job for nearly four years and was earning $24.50 a week. His employer reported him to be one of his best men. He was still living with his mother and stepfather and younger brothers and sisters.

Case 12.—Fanny (intelligence quotient 61, Goddard revision) was one of several girls who had been employed at least 90 per cent of the time after leaving the institution. In the six years she had been out of the institution she had held three positions. She had never been a behavior problem, but her home conditions had been very undesirable. Her father, formerly an inmate of a State institution for the insane, was a heavy drinker and at one time had made a criminal assault upon her. When she was 15 and in the sixth grade at school, her feeble-minded mother died. Soon after this Fanny and her brothers and sisters were brought to the juvenile court on a dependency petition, and Fanny, after first being placed in a foster home, was sent to one of the State institutions for the feeble-minded.

After more than four years in the institution Fanny left to live with an aunt whose husband kept a small store and who had a comfortable home. For the first six months the aunt kept Fanny at home but later allowed her to go to work. Her first position was in a candy factory, carrying trays of chocolate to the dippers and trays of finished chocolates to the packers. She stayed here nearly two years. Her next work was in a tailor's shop, where an uncle was employed, writing prices on orders. Although this job required accuracy and some simple arithmetic, Fanny's work was satisfactory. She remained at the shop for nearly six months. She was not satisfied with her pay of $15 a week and left to find a better-paying position. Her next position, which she obtained after a few weeks of unemployment, was operating a tag-cutting machine in a factory. At the time of the study she had done this work for nearly three years and was earning $16.80 a week. She was apparently contented with her job and with her aunt's home.

Case 13.—Anna's intelligence quotient was 47 (Goddard revision) about the time she left the institution but was 57 according to an earlier test. She had worked steadily between 80 and 90 per cent of the seven years since she had left the institution. Her parents had come from Poland when she was a small child; both parents were illiterate and unable to speak English. Her father was a laborer. Anna came to the attention of the juvenile court because of sex delinquency when she was 12 years of age and in the third grade at school, and she was sent to the State institution for the feeble-minded. Here she remained 2½ years, until she was 15 years of age.

Upon returning home Anna found a position almost at once in a paint-manufacturing establishment through a forewoman who knew her family. At first she pasted labels on bags of plaster and later labeled paint cans, work that involved picking out the right kind of label for the different kinds of paint. She stayed in this place nearly four years; her wage was raised from $13 to $17 a week. The superintendent of the factory said that she had been a regular and careful worker until about two months before he finally discharged her, when she began to stay out so late at night that she was unable to do her work properly the next day. Anna then got a position in a candy factory wrapping candy, which she kept for more than a year. At the end of this time she married, but she continued to live with her parents and to work. Her next position was in an establishment that manufactured felt products. She was employed to string felt washers for gaskets at $12 a week, later being advanced to $15. She left this position after six months because she was pregnant. A few months before the girl was visited by the bureau agent her husband had been killed, while robbing a store, by a police officer. At the time of the interview Anna was staying at home keeping house for her father and her sisters and making clothes for the baby she was expecting.

Case 14.—The supervision given Victor in his married sister's home apparently was an important factor in his successful adjustment. His intelligence quotient was 62 according to a test given him about the time he left the institution, but according to the results of an earlier test (both Goddard revision) was 71, and his release was recommended by institutional authorities. Before commitment to the institution he had been difficult to control. His parents were dead, and he lived first with one of his three married sisters, then with another. He had a court record for running away and had once stolen $10. When nearly 19 years of age he left the institution after remaining there for nearly five years. He could not give a clear account of his employment history in the four years since then, but he had had several positions before the one in which he was employed when interviewed. These positions he had held for several months at a time. From one of these positions—as laborer in a machine shop—he had been discharged according to his account for "fooling." Aside from that there was no indication of any behavior difficulty. At the time of the study he had been

employed for 10 months as helper on a delivery truck, earning $18 a week. He paid his sister $10 a week for room and board, and, in spite of several periods of unemployment, he was able to buy good clothes, go to the "movies" once a week, and save $200. He had offered this money to his sister to pay for hospital care for her child. "I'd like to go back to Dixon some day," he said to his sister, "and show myself to the fellows. Fine clothes and bank account; they won't believe I did it by myself."

Case 15.—The delinquencies of Jean (intelligence quotient 66) were closely associated with his failure to hold a position for any length of time during the three years since he had run away from the institution. Though he had had seven positions, he was out of work nearly 70 per cent of the time. Jean's parents were both born in the United States. His father was a heavy drinker and at the time of the study was in a hospital for the insane. The boy had been in the juvenile court at least five times for stealing before his commitment to Lincoln. He was 17 years of age at the time he ran away from that institution after a stay there of only three months. After his return he continued to be delinquent, and after several months, during which he did no work, he was arrested and sentenced to jail. After his release he worked irregularly; he was employed for one week as a laborer by a railroad company and for another week as helper by an express company. While at this job he was again arrested and sentenced to jail for three months. After leaving jail he was idle for some time and was then employed by a coke company as laborer. He was discharged in two weeks for neglect of duty. He was later taken back by the same firm, however, and kept on for seven months until he was again arrested for stealing and sentenced to jail. The company took him back after his release but after six weeks discharged him for going to sleep on the night shift. He later found two more positions as laborer but kept them only a week and four days, respectively. At the time of the interview he was living with his mother and brother and had been out of work only a few days.

Case 16.—William's long delinquency record was at least one cause of his failure to work steadily. His intelligence quotient was 61, and he was 18 years of age when he left Lincoln.

William came to the United States with his parents from Austria when he was 3 years of age. His mother died of alcoholism soon after her arrival, and the boy was brought up by his father, a packer in the stockyards, and a stepmother. At the age of 13, after he had been brought into court repeatedly for stealing, incorrigibility, and "bumming," he was involved in a hold-up and was sent to the St. Charles Institution for Boys, where he remained for three years. After his return he was again arrested and brought into court, and this time he was committed to the State institution for the feeble-minded. He twice ran away from that institution, and after his second escape, less than four months after his commitment, was arrested for stealing and was sentenced to the State reformatory for a year. On his release from the reformatory, William applied for work at a social agency. Temporary work as errand boy was found for him with two other social agencies; the secretary of one of these stated that he did not need an errand boy but thought that William should be kept busy. During the several months that followed this job William could find no work; he then was arrested for burglary and sentenced to the house of correction for six months. After his release he obtained two positions; he spent a week in one factory spraying paint on lamp shades and three weeks in another cutting and carrying candy. He claimed to have been laid off from both these positions on account of slack work; his employment record could not be found. The day after he left the last position he was again arrested, this time for trespassing on railroad property, and again sentenced to jail. At the time of the interview he was living in a rooming house, having been released from jail 10 days previously, and said he was looking for a job. He had been outside penal institutions for 12 months and had been employed 11 weeks.

Case 17.—Carl was another boy whose antisocial traits made it impossible for him to stay long out of institutions for the delinquent and seriously interfered with his working. His intelligence quotient was 73 according to one test and 67 according to another. His father was dead, and his mother, a hard-working Polish woman, laid Carl's misconduct to the fact that she had always been obliged to work to support her children and had never been able to stay at home to look after him. Before the boy had finally been committed to Lincoln at the age of 17, he had been arrested and brought to court four times, once for bur-

glary, and had been in two institutions for delinquent boys. The authorities at Lincoln found him quarrelsome, destructive of property, at times vicious, and lacking in self control, and they said that he should not be released. When Carl, after three years, ran away from the institution for the second time, however, he was not returned.

Between the date he left the institution and the date of the inquiry he had had a possible working period outside institutions of two years and three months and had been in various institutions for 14 months. He had worked in all approximately 13 months. He had had several positions but kept none of them for more than a few months except once when he lived with his uncle and worked for him. During the first year he had had two positions, one in a machine shop for seven weeks and the other as waiter in a restaurant for three months. Whether or not he was discharged from these positions could not be learned; he said he left of his own accord. About the time he left the second position he was arrested for burglary and sentenced to the State reformatory. There he remained for 12 months. After his return home his relatives gave him some work to do; first he did odd jobs for his brother-in-law, such as watering the garden and washing windows, and then his uncle, a building contractor, who lived in a small town, took him into his home. For eight months he did odd jobs for his uncle in exchange for his board. He then returned to Chicago and almost immediately was arrested for stopping a girl on the street while intoxicated. After a few weeks in jail he was released, only to be brought into court for robbery and again sentenced to jail. At the time of the bureau inquiry he had been out of jail for several weeks and had been employed at odd jobs as laborer, one or two days at a place, unloading coal, lumber, or freight.

Case 18.—Louis (intelligence quotient 62, Goddard revision) had had 16 positions with eight employers in a period of 7½ years and had been out of work much of the time. The exact amount of time he had worked was not ascertained, but none of his positions except when working for his father lasted more than a few months and most of them not more than a few days. The boy was difficult to control, though he had no court record for delinquency, either before or after leaving the institution. Before he went to Lincoln he played truant from school, and his father and stepmother could not manage him. According to his brother, he was still uncontrollable after he came back; sometimes he would live at home and sometimes "bum around," and he would work only occasionally. After his discharge, at the age of 13, from the institution where he had been for two years, he worked very irregularly for his father, a junk dealer, over a period of more than four years. Since then he had been employed 13 different times as helper on wagons with six neighborhood retail ice and coal dealers, one of whom employed him on five occasions for a few days at a time, laying him off when the need for an extra worker was over. Not long before the interview he had obtained a job as porter in the dining room of a large department store, but he had been discharged within three days.

Case 19.—Ralph, a negro boy with an intelligence quotient of 68 (Goddard revision), reported more jobs than any other boy included in the study. In a period of approximately 6½ years he had had 30 positions with 28 employers. He said that these were all that he remembered but he might have had others. He was employed only about one-third of the time, obtaining his first work at the age of 18. He held most of his positions between one and three weeks but several times worked for two months, and once for three months, with one employer. Most of his jobs were in domestic and personal service, such as dishwasher, porter, and bus boy. He had also been a laborer in a factory, washed cars in a garage, helped on a delivery wagon, and once ran an elevator in a hotel for three days. He earned $10 a week when he started work and, at the time of the study, claimed to be making $30 a week shining shoes.

Ralph's inability to hold a position appeared to be due not to any inability to do the work but to his desire for a change. One of his employers for whom he had washed dishes and mopped floors said that he worked well and quickly when on the job but could not be counted on to appear at work. His mother said he was "a good boy at home, mild, obliging, obedient" and that his worst habit was "running away." He had a delinquency record before commitment to Lincoln at 14 years of age and after his return four years later was arrested several times for disorderly conduct and once for soliciting women on the streets. For one of these offenses he was sentenced to a month in jail.

Case 20.—Bernard (intelligence quotient 69, Goddard revision) was also unable to hold a position, having been out of work more than 80 per cent of 4½ years that he might have worked.

Bernard's home environment before commitment to the institution for the feeble-minded was unfavorable. According to one social-agency record both his parents, of Polish nationality, were alcoholic; the father was abusive, and the children often went without food. Bernard's parents could not control him; his attendance at school was irregular, and he often ran away after arrival at school. At one time he was committed to the parental school and at the age of 10 to the State institution for the feeble-minded. About two years later he was discharged from the institution by the court against the advice of institution officials. He returned to regular school for two years, reaching the sixth grade.

At the age of 14 he started to work. His father found him a position packing pork in the meat-packing plant where he worked. After three months the boy left the plant and also left home, giving as a reason that his father took all his earnings. He found a job for himself washing bottles in a dairy. At this work, he said, he earned room and board and $18 a week. He stayed at the work about four months. For the following three years he lived at home off and on and loafed. During this time he stole some money and a gold watch and was committed to jail for nine months. In the next two years he had three positions which he kept from three weeks to a month each. One of these positions was as a laborer, trucking supplies in a packing house; another was packing peanut butter in jars; and his last work, in which he was employed at the time of the study, was washing bottles. He was earning $25 a week. One of his employers said that the boy was unsatisfactory in his work, being careless and quarrelsome.

Case 21.—Lawrence was another boy with a relatively high intelligence quotient of 74 (Goddard revision) who did not succeed after he left the institution. According to an earlier test (also the Goddard revision) his intelligence quotient was 86. He had always been a difficult boy to manage, and institution officials believed he should not be released. He had been admitted to Lincoln at the age of 10 at the request of his mother, who could not control him. When 12 years of age, he was discharged to his married brother. After he had lived with his brother for about a year, he relapsed into his old habit of running away from home, and his brother returned him to the institution. Two years before the study was made he ran away from the institution and his brother took him into his home and tried to find work for him. Lawrence failed to keep the jobs found for him, however, and his brother finally put him out of the house because he would not work. After leaving his brother's home, Lawrence was arrested several times for hanging around a pool room and spent some time in jail. When his brother was interviewed by the Children's Bureau agent, he did not know where Lawrence was nor what he was doing. Several months after the study was made it was learned from the Lincoln school for the feeble-minded that the boy had recently been readmitted to that institution.

Case 22.—Mental defect appeared to be the chief reason that Irene, a girl with the low intelligence quotient of 35 (Goddard revision), was unemployed much of the time. During a period of nearly six years she had worked 1½ years with two employers.

Her home surroundings were good. Her father, a Russian Jew, kept a prosperous-looking grocery store, and her mother appeared to understand her limitations. When Irene was 15 years of age she was criminally assaulted and was brought into the juvenile court. After a mental examination she was committed to Lincoln, where she remained about a year and a half. The authorities there considered her "a quiet, well-behaved little girl."

After her return home her parents kept her at home for a few months and then through friends got her a position in a laundry. Her mother said Irene managed to do the simple work of ironing collars successfully and found her way to the laundry without difficulty, although it was necessary to take two street cars. After six months the laundry burned down, and Irene lost her work. After several months of unemployment her mother found a position for her in a paper-box factory, folding boxes at $7 a week. Here Irene remained for a year, when, according to her mother, she was laid off on account of slack work. During the following four years the family made no effort to get work for the girl; her parents said that they were afraid she might get into some trouble away from home. At the time of the inquiry Irene was helping with the housework and occasionally helped in her father's grocery store, although she was not able to make change and, according to her sister, "could not even sell candy."

Case 23.—Melville (intelligence quotient 44, Goddard revision) had worked intermittently since leaving the institution, apparently primarily because of his mental defect. His father, a glass blower by trade, had always supported the family, and the boy had a good home. When he was 17 years of age, however, and his parents found that he could not get or keep any kind of work, they did not know what to do with him and finally applied for his commitment to Lincoln. After 2½ years there he went home on a vacation and did not return. At the time of the inquiry he had been out of the institution and living at home for seven years; he was occupied irregularly doing chores for neighbors, such as chopping wood, cutting lawns, and shoveling snow, and was earning a few dollars a week. He was apparently easy to manage and had never got into any trouble; his mother said that he had no desire to be out with other young people but was content to stay at home.

Case 24.—Russell (intelligence quotient 47) had had but one position, which lasted about six weeks, in the five years since leaving the institution and had apparently failed to find work that he could do, principally because he was mentally defective. He was dull in appearance, physically undersized, and unable to answer such simple questions as his birth date and his age when asked by the bureau agent. Before he was sent to the institution at the age of 13 years, he had been a behavior problem. He had stayed out at night, played truant from school, and would yell and scream when his family reproved him. Then he had been brought into the juvenile court on the charge of being ungovernable. He had no court record since his return, and as far as is known his mother and sister with whom he lived had no trouble in controlling him. His mother was a dressmaker and took roomers, and she said he did not have to work. He was 14 years of age when he came home after a year and a half in the institution, and he was 19 years of age before he found his first job, through an advertisement, as delivery boy for a paint shop. His employer said that he was not a satisfactory worker. Though he was able to make deliveries, he was unreliable and frequently failed to turn up in the mornings; sometimes the employer was obliged to go to his house to get him to work.

Case 25.—Vincent's instability as a worker no doubt was also largely due to his mental defect. His intelligence quotient was 45; he had never been in court for delinquency and was not difficult to manage except for an occasional outburst of temper. He had been sent to the Lincoln institution at the request of his mother, who said that the boy had run away from home because his father had beaten him. His father was a steady worker but alcoholic. His parents were not on good terms; his mother finally left her husband to live with another man. Vincent was 14 when committed to Lincoln and 17 when he was sent home to his father on a vacation. During the four years that followed his return he had had 11 positions but had been unemployed only about six months in all. Six times he had worked on a machine in the same paper-box factory but had been laid off on account of slack work. The nature of the machine at which he worked was not learned. Three times he had been employed in a piano factory, varnishing piano backs. The foreman there stated that he had twice discharged him because, although he was a good worker at times, he could not concentrate on his work long and would stop to play, and it was not possible to supervise him closely enough to keep him at work. The boy had also worked as laborer for a coal company loading baskets of coal, but, according to that employer, was unable to make deliveries even in the next block because he could not find addresses. He left this job after an outburst of temper when his employer refused to let him drive the horses. The longest time he had stayed in any one position was six months. He had earned as much as $18 a week in the piano factory but was getting only $12 a week, tying boxes in bundles at the box factory, at the time of the study.

Case 26.—Hugh's failure to work steadily in one position appears to have been due more to the fact that he attempted work beyond his mental capacity than to any unwillingness to work or to his delinquent tendencies. Industrial conditions also played a part in his unemployment. His intelligence quotient was 63. He worked for four employers at seven kinds of work and was unemployed more than half the time.

Hugh had been committed to the institution for the feeble-minded at the age of 11 years, after having been brought into the juvenile court for stealing. He did not attend school regularly, and his mother, a respectable-appearing Polish woman, had difficulty in controlling him. He stayed at the institution about two years; he was then discharged with the approval of the institutional authorities and went home to live with his parents. As he was too young to obtain

a work certificate, he went back to school and remained in the third grade until he was 16 years of age.

No one who understood Hugh's limitations helped him to find suitable work, although for part of the time after leaving the institution he was on probation at the juvenile court for automobile stealing. Through the efforts of his brother-in-law he first obtained work operating a power machine in a tack and nail factory. He kept this position about three months and was then, according to his statement, laid off on account of slack work. Whether or not his work was satisfactory could not be learned. His brother-in-law then found him a position in a steel mill, in which he himself was employed, as door boy of an open-hearth furnace. Hugh was said to be satisfactory in this work, but after four months, the longest time he worked at any one job, the mill closed down, and he was again idle. After some months he found temporary work of a few weeks as a laborer, digging holes for lamp posts. Somewhat later he was tried out for a month on a job in a metal-working establishment grinding valves, but he was discharged as unsatisfactory. He also spent three days with the first firm that had employed him, feeding a tack machine. Finally his brother-in-law procured a job for him in the masonry department of the steel mill as helper to a bricklayer; after six weeks, work became slack in the bricklaying department, and the boy was transferred to a job at rivet heating. According to his employer, Hugh was unable to do this work and was discharged after two weeks. At the time of the inquiry he was out of work.

Case 27.—Nellie's work experience was unsuccessful, at least partly because she tried to do work beyond her mental capacity but also because of her delinquent tendencies. She was unemployed three-fourths of the time she was outside institutions. Her intelligence quotient was 61. When 16 years of age she ran away from home and lived with a man in a rooming house until the police found her and notified her father. The latter, a steam fitter by trade and apparently an intelligent man, took the girl to a doctor who recommended that she be put in the State institution for the feeble-minded. Here she remained nearly four years, leaving at the age of 20.

On returning home Nellie at first lived with a married sister and helped with the housework; after a few months, through the efforts of a relative, she went into the telephone company to learn to be an operator. After two weeks she was discharged for incompetence. Soon after this she obtained work in a factory manufacturing electrical parts, "winding wire," a job at which she earned $14 a week. No record was found as to whether or not she was able to do this work satisfactorily; after 7 weeks she left because she wanted "a change." From her next position, labeling cans in a factory, she was discharged as incompetent after two months. Her only other position, which she kept two months, was as saleslgirl in a store, earning $12 a week. While employed there she ran away with a man and was arrested and sent to a private institution for delinquent girls. After three years in that institution she returned to her sister's home. She again attempted to run away, however, so that her father took her back to the institution, where she was living at the time of the inquiry.

CONCLUSIONS

Most of the young persons who had been in the Illinois State institutions for the feeble-minded included in the present study, like the former pupils of special classes, had been employed at some time after leaving the institutions. Eighty-nine per cent of the 151 who had been outside the institutions for at least a year, compared with 94 per cent of the special-class pupils, had had some employment, and 45 per cent, compared with 57 per cent of the special-class pupils, were employed when interviewed.

A considerable number of the boys had worked steadily; of the 36 girls who had a record of employment 20 had married, and their work history was therefore interrupted. Among the 98 boys who had a record of employment, 38 had worked the greater part of the time (at least 70 per cent of the period) after leaving the institutions and 21 had been employed less regularly; for 39 the information was incomplete, but many of them are believed to have been irregular workers. The intelligence levels of those who can be considered as

steady workers ranged all the way from those who would be classified as imbeciles to border-line cases. Because of the considerable number of boys for whom information as to time unemployed is incomplete, it is not possible to state conclusively whether or not boys from the institutions for the feeble-minded had more unemployment than boys of about the same mentality from the special classes who had remained outside institutions. The indications are, however, that the boys from the institutions did not have as favorable work experiences as those from the special classes. In comparison with boys of unselected intelligence both the boys from the institutions and from the special classes had a great deal of unemployment.

A much larger proportion of boys from the institutions than from the special classes had had court records for delinquency serious enough so that they were put on probation or placed in institutions. No doubt this difference had a great deal to do with the amount of unemployment among the two groups of boys. From the fact that few boys from institutions who were known to have worked regularly were delinquent after leaving the institutions, and from a study of the case histories obtained for some of the boys and girls, it would appear that personality difficulties were closely associated with failure to work steadily. As far as could be judged from the small number of individuals in the present study, all of whom were morons or imbeciles of the higher grades, differences in intelligence levels as measured by intelligence quotients, as among individuals from special classes, had very little relation to steadiness or success at work.

No attempt was made in the present study, as has been done in a number of other studies of persons discharged from institutions for the feeble-minded, to ascertain whether the individuals studied were succeeding or failing in their social adjustment. That a number of the boys were able to support themselves is indicated by the median wage in their last job ($24.71) and by the fact that 38 of the 118 whose afterhistories were studied are known to have worked the greater part of the time (at least 70 per cent) after leaving the institutions.

The failure of some of those who had left the institutions to adjust themselves to either industrial or social conditions in the community, which is brought out in some of the case histories and is shown by the fact that 16 per cent of those included in the study had drifted into some type of institution by the time the study was made, points to the great need for follow-up work for those leaving the institutions. Individuals who have pronounced antisocial or delinquent tendencies should be given suitable custodial care. In some States, such as Massachusetts, New York, and Michigan, the State department responsible for the administration of State institutions for the mentally defective has made plans for the supervision of paroled patients. The findings of this study indicate that similar provision should be made for the parole under supervision of patients from the Illinois State institutions for the feeble-minded.

APPENDIX A.—TABLES AND TABULAR SUMMARIES OF WORK HISTORIES

TABLES

TABLE I.—*Industry and occupation of all jobs and intelligence quotient of boys formerly attending special classes in seven cities*

Industry and occupation	Jobs held by boys formerly attending special classes					
	Total	Intelligence quotient of boy holding job				
		Less than 50	50, less than 60	60, less than 70	70 or more	Not reported
Total	4,515	187	1,104	1,883	1,228	113
Agriculture	153	2	28	73	46	4
Extraction of minerals	9	-------	2	4	3	-------
Manufacturing and mechanical industries	2,677	129	684	1,103	684	77
Learners	121	3	25	60	33	-------
Laborers and helpers	537	27	132	213	144	21
Semiskilled operatives	1,850	96	495	760	444	55
Others in manufacturing and mechanical	169	3	32	70	63	1
Transportation	557	14	131	241	159	12
Teamsters	114	1	33	53	25	2
Motor-truck and taxi drivers	194	1	24	94	68	7
Helpers to drivers	73	2	24	26	19	2
Telegraph and special-delivery messengers	67	1	24	28	13	1
Laborers	75	9	18	24	24	-------
Others	34	-------	8	16	10	-------
Trade	467	20	86	196	158	7
Delivery men (drivers of horse vehicles)	56	1	12	25	17	1
Delivery men (truck drivers)	86	-------	7	27	51	1
Helpers to drivers	97	4	20	42	29	2
Sales boys	62	1	9	23	27	2
Stock boys	10	-------	1	5	4	-------
Newsboys	23	3	8	8	4	-------
Others	133	11	29	66	26	1
Public service	103	2	21	55	23	2
Soldiers, sailors, marines	77	1	13	38	23	2
Others	26	1	8	17	-------	-------
Professional service	46	-------	17	7	22	-------
Attendants and helpers	25	-------	12	4	9	-------
Others (actors, showmen, etc.)	21	-------	5	3	13	-------
Personal and domestic service	177	4	51	65	53	4
Waiters and counter boys	14	-------	6	2	6	-------
Household servants	3	-------	-------	1	2	-------
Laundry operatives	10	-------	-------	7	3	-------
Others	150	4	45	55	42	4
Clerical occupations	321	16	83	135	80	7
Messengers, errand and office boys	195	13	48	83	47	4
Bundle, cash, and check boys	7	-------	2	1	4	-------
Stock-room and shipping-room workers	81	1	4	34	21	1
Others	38	2	9	17	8	2
Not reported	5	-------	1	4	-------	-------

TABLE II.—*Industry and occupation of all jobs and intelligence quotient of girls formerly attending special classes in seven cities*

Industry and occupation	Jobs held by girls formerly attending special classes					
	Total	Intelligence quotient of girl holding job				
		Less than 50	50, less than 60	60, less than 70	70 or more	Not reported
Total	1,729	151	526	708	319	25
Agriculture	8	4	2	1	1	
Extraction of minerals	1		1			
Manufacturing and mechanical industries	1,062	95	348	443	161	15
Learners	17		6	7	4	
Semiskilled operatives	1,010	90	331	425	149	15
Sewers, millinery shops	3		3			
Others (includes those coded as laborers)	32	5	8	11	8	
Transportation	7			4	2	1
Telegraph and special-delivery messengers	3			3		
Telephone operators	3			1	1	1
Others (includes those coded as laborers)	1				1	
Trade	160	3	38	69	47	3
Sales girls	88	1	13	39	35	
Stock girls	29		9	13	5	2
Others	43	2	16	17	7	1
Professional service	17		5	8	4	
Attendants and helpers	13		3	7	3	
Others	4		2	1	1	
Personal and domestic service	391	43	112	159	72	5
Waitresses and counter girls	67	2	20	31	14	
Household servants	184	21	62	71	26	4
Laundry operatives	84	11	20	33	19	1
Others	56	9	10	24	13	
Clerical service	82	6	19	24	32	1
Messenger and errand girls	19	3	3	4	9	
Bundle, cash, and check girls	25	3	5	12	4	1
Shipping and stock room workers	4		2		2	
Typists	6			1	5	
Others	28		9	7	12	
Not reported	1		1			

TABLE III.—*Jobs held in manufacturing and mechanical industries as semiskilled operatives, and intelligence quotient of boys formerly attending special classes in seven cities*

Jobs as semiskilled operatives in manufacturing and mechanical industries	Jobs held by boys formerly attending special classes					
	Total	Intelligence quotient of boy holding job				
		Less than 50	50, less than 60	60, less than 70	70 and more	Not reported
Total	1,850	96	495	760	444	55
Button factories	35	----	10	15	9	1
Machine operators	21	----	8	7	5	1
Others	14	----	2	8	4	----
Camera and optical factories	22	----	3	13	6	----
Chemical works and allied industries	39	8	4	14	9	4
Machine operators	8	----	2	6	----	----
Others	31	8	2	8	9	4
Clothing and cloth operating	95	1	14	47	32	1
Machine sewers	20	----	----	13	7	----
Pressers and ironers	27	----	5	10	12	----
Others	48	1	9	24	13	1
Electrical-supply factories	91	10	31	21	29	----
Machine operators	36	4	14	9	9	----
Others	55	6	17	12	20	----
Food industries	157	9	25	71	40	12
Bakeries	55	3	7	34	9	2
Candy factories	53	3	15	18	10	7
Canneries, fruit and vegetable	12	2	1	4	5	----
Slaughter and packing houses	18	----	1	9	5	3
Other food industries	19	1	1	6	11	----
Lumber and furniture industries	196	10	62	78	41	5
Machine operators	47	2	11	18	15	1
Others	149	8	51	60	26	4
Metal trades and automobile factories	858	39	247	353	206	13
Drill-press operators	67	2	23	29	13	----
Punch-press operators	40	1	8	26	4	1
Other machine operators	227	8	74	77	66	2
Assemblers	103	10	26	38	23	6
Riveters, rivet heaters, and passers	67	2	19	22	24	----
Core makers	18	----	10	6	1	1
Sprayers, dippers	15	----	4	10	1	----
Inspectors	22	----	5	9	7	1
Others	299	16	78	136	67	2
Paper-box factories	25	1	12	7	5	----
Machine operators and press feeders	13	----	8	2	3	----
Bench workers and others	12	1	4	5	2	----
Printing and publishing	30	----	6	21	2	1
Press feeders and machine operators	10	----	2	7	----	1
Bench workers and others	20	----	4	14	2	----
Shoe factories	111	6	30	44	17	14
Cutters	8	1	4	3	----	----
Stitchers and other machine operators	15	----	2	7	2	4
Others	88	5	24	34	15	10
Textile mills	19	1	4	13	1	----
Tobacco factories	9	2	6	----	----	1
Toy and novelty manufacturing	31	----	8	9	13	1
Others	132	9	33	54	34	2

TABLE IV.—*Jobs held in manufacturing and mechanical industries as semiskilled operatives, and intelligence quotient of girls formerly attending special classes in seven cities*

Jobs as semiskilled operators in manufacturing and mechanical industries	Jobs held by girls formerly attending special classes					
	Total	Intelligence quotient of girl holding job				
		Less than 50	50, less than 60	60, less than 70	70 or more	Not reported
Total	1,010	90	331	425	149	15
Button factories	27	3	5	11	8	--
Machine operators	9	3	3	2	1	--
Others	18	--	2	9	7	--
Camera and optical factories	35	1	4	15	15	--
Chemical works and allied industries	49	2	19	19	8	1
Machine operators	11	1	5	4	1	--
Labelers, wrappers, packers	17	1	3	6	6	1
Others	21	--	11	9	1	--
Clothing and cloth operating	205	13	46	109	28	9
Hand sewers	32	2	10	19	1	--
Machine sewers	75	4	15	34	13	9
Trimmers and basting pullers	27	1	7	13	6	--
Others	71	6	14	43	8	--
Electrical supply factories	62	1	27	28	6	--
Machine operators	15	--	7	6	2	--
Others	47	1	20	22	4	--
Food industries	177	17	43	72	40	5
Bakeries	37	7	8	14	5	3
Wrappers and packers	24	4	5	10	4	1
Others	13	3	3	4	1	2
Candy factories	58	6	19	23	8	2
Wrappers and packers	35	4	10	15	5	1
Others	23	2	9	8	3	1
Canneries, fruit and vegetable	40	2	9	9	20	--
Slaughter and packing houses	16	--	2	13	1	--
Other food industries	26	2	5	13	6	--
Lumber and furniture industries	7	1	4	1	1	--
Machine operators	1	--	1	--	--	--
Others	6	1	3	1	1	--
Metal trades and automobile factories	86	11	34	33	8	--
Machine operators	31	3	13	13	2	--
Inspectors	4	--	2	2	--	--
Others	51	8	19	18	6	--
Paper-box factories	85	7	33	41	4	--
Machine operators and press feeders	35	1	10	23	1	--
Bench workers and others	50	6	23	18	3	--
Printing and publishing	30	2	17	8	3	--
Press feeders and machine operators	10	--	6	4	--	--
Bench workers and others	20	2	11	4	3	--
Shoe factories	74	8	32	30	4	--
Stitchers and other machine operators	12	--	5	6	1	--
Others	62	8	27	24	3	--
Textile mills	25	1	15	6	3	--
Tobacco factories	44	7	18	14	5	--
Bunch makers and rollers	16	2	10	4	--	--
Others	28	5	8	10	5	--
Toy and novelty manufacturing	19	2	6	8	3	--
Others	85	14	28	30	13	--

TABULAR SUMMARIES OF WORK HISTORIES

TABULAR SUMMARY A.—*Occupation and industry, duration, and weekly cash wages of last job of 114 boys formerly enrolled in special classes of the public schools whose last cash wages were $30 a week or more, by age at date of study, intelligence quotient, and city*

City and industry of last job	Occupation of last job	Weekly cash wages	Duration of last job	Age at date of study	Intelligence quotient
DETROIT					
Manufacturing and mechanical industries:					
Building trades	Carpenter, learning	$30.00	9 months	22	62
	Laborer	33.60	1 day	21	73
	Carpenter	40.00	25 days	19	73
Automobiles	Operating saw	30.00	1 year	22	46
	Operating machine	36.00	5 months	22	50
	Helper on machine	45.00	6 months	20	54
	Toolmaker	45.60	1 year	22	54
	Laborer	30.00	4 months	21	56
	Operating punch press	36.00	1 year 4 months	20	57
	Trimmer	32.50	1 year 7 months	20	59
	Operating buffing machine	38.25	1 year	21	59
	Operating drill press	36.00	7 years 7 months	20	60
	Operating grinding machine	38.40	1 year 2 months	20	61
	Spraying machine	31.20	1 year	20	61
	Operating gluing machine	36.00	1 year 8 months	22	61
	Cutting leather	50.00	3 years	21	61
	Cutter, grinding machine	36.00	1 year	20	63
	Paneler (hand)	33.80	2 months	20	63
	Helper, carpenter shop	36.00	9 months	20	63
	Helper, lathe machine	30.00	1 month	20	63
	Millwright, foundry	36.00	[1]	20	64
	Operating tenoner machine	36.00	1 year 9 months	22	64
	Carrying tools and material	30.00	3 months	19	65
	Core maker	40.80	11 months	20	66
	Assembling (hand)	32.50	8 days	19	66
	Top builder (hand)	48.00	3 years 5 months	20	69
	Operating gear-cutting machine.	48.00	3 years 9 months	20	69
	Operating piston machine	36.00	6 months	21	70
	Operating boring machine	30.72	2 years	21	70
	Assembling body glass (hand)	39.60	1 day	22	70
	Assembling chassis (hand)	30.00	4 years 3 months	21	71
	Operating coil-winding machine.	36.00	10 months	22	72
	Operating screw machine	36.25	4 months	19	73
	Trimmer (hand)	35.00	6 months	19	74
	Inspecting	33.75	2 months	20	78
	Assembling (hand)	38.50	4 months	20	79
	Finishing (hand)	40.50	27 days	20	79
	Soldering (machine)	36.00	7 months	22	80
	Sanding paint	34.00	9 months	19	82
Metal goods	Assembling (hand)	30.00	2 months	20	55
	Chipping	32.00	10 days	20	58
	Operating straightening machine.	33.00	4 years	19	64
	Operating wire-bending machine.	30.00	1 year 2 months	19	67
	Operating milling machine	46.75	2 years 11 months	19	73
	Operating grinding machine	40.00	3 months	21	74
	Operating electric truck	32.40	2 years 10 months	21	78
Sand and brick	Helper to tile setter	30.80	9 months	22	73
	Tempering clay (machine)	36.00	1 year	19	61
Food products	Trimming sausage	30.00	14 days	21	60
	Shackling	31.63	4 years 10 months	21	65
	Baker	32.00	7 months	20	65
	Butcher	34.00	3 days	21	76
Wooden packing boxes.	Off-bearer, and stenciling machine.	30.00	8 months	20	54
Salt works	Filling sacks with salt	40.00	10 months	20	66
Other industries	Helper on truck	30.00	3 days	18	45
	Truck driver	30.00	2 years 4 months	22	52
	Learning to take blue prints	32.50	1 year 5 months	21	55
	Truck driver	32.40	28 days	20	56
	Peddler	30.00	5 years 1 month	21	57
	Teamster	36.00	6 months	19	58
	Truck driver	36.00	2 years 2 months	23	59
	Laborer	31.50	1 month	21	60
	Stock boy	35.00	1 year 4 months	19	61

[1] Not reported.

TABULAR SUMMARY A.—*Occupation and industry, duration, and weekly cash wages of last job of 114 boys formerly enrolled in special classes of the public schools whose last cash wages were $30 a week or more, by age at date of study, intelligence quotient, and city*—Continued

City and industry of last job	Occupation of last job	Weekly cash wages	Duration of last job	Age at date of study	Intelligence quotient
DETROIT—continued					
Other industries	Truck driver	$30.00	[1]	21	62
	Teamster	30.00	21 days	20	62
	Truck driver	30.00	1 year 7 months	20	62
	Salesman	30.00	2 years	22	63
	Truck driver	36.00	4 years 7 months	22	63
	Do	36.00	6 days	22	63
	Do	33.00	4 years	22	64
	Do	30.00	1 month	20	64
	Do	30.00	10 months	20	64
	Chauffeur	35.00	4 months	19	64
	Truck driver	36.00	6 months	20	65
	Do	36.00	2 months	20	65
	Stock clerk	30.00	4 months	21	66
	Truck driver	30.00	1 month	19	67
	Operating motion-picture machine.	40.00	1 year 1 month	22	67
	Truck driver	30.00	21 days	20	70
	Do	36.00	4 months	21	72
	Do	32.00	11 months	20	74
	Salesman	32.50	3 months	20	76
	Truck driver	35.00	1 year 9 months	21	76
	Do	33.60	6 days	21	76
	Do	30.00	1 year 2 months	20	76
	Do	36.00	1 year 5 months	21	79
	Do	30.00	6 months	20	82
ROCHESTER					
Manufacturing and mechanical industries:					
Building trades	Learning to lay floors	30.00	7 months	19	68
	Lathing	34.00	1 year 7 months	21	74
	Learning carpentry	37.40	6 months	20	77
Clothing	Pressing edges	33.00	1 year 5 months	21	57
	Pressing seams	35.00	21 days	21	76
Foundry	Moulder's helper	30.00	4 months	21	65
Shoes	Assembling (hand)	30.00	1 year	19	72
Electrical equipment	Helper, washing machine	31.68	[1]	19	74
Food products	Laborer	30.00	17 days	20	74
Other industries	Helper on truck	30.00	5 months	19	70
	Fireman on freight train	30.00	1 year 2 months	19	74
NEWARK					
Manufacturing and mechanical industries:					
Building trades	Mason's helper	30.00	2 months	20	68
	Carpenter	49.50	do	18	69
Food products	Baker's helper	30.00	5 years 11 months	21	61
Liquor and beverages	Bottling (machine)	30.00	2 months	21	61
Horns	Learning toolmaking	30.00	8 months	20	61
Leather goods	Bag maker (machine)	35.00	1 month	20	67
Clothing	Vest maker (machine)	33.50	2 years 5 months	21	67
Auto accessories	Operating grinding machine	38.00	14 days	18	80
Other industries	Helper on truck	30.00	1 year 11 months	19	51
	Truck driver	45.00	4 years 2 months	21	67
	Do	30.00	6 months	21	70
	Drummer	40.00	2 months	22	78
LOS ANGELES					
Manufacturing and mechanical industries:					
Pipes	Welder	43.20	2 months	20	66
Boilermaking	Boilermaker	36.00	26 days	21	66
OAKLAND					
Other than manufacturing and mechanical industries	Locomotive fireman	35.00	2 months	19	67
CINCINNATI					
Manufacturing and mechanical industries:					
Foundry	Operating electric truck	34.50	1 month	18	[1]

[1] Not reported.

TABULAR SUMMARY B.—*Occupation and industry, duration, and weekly cash wages of last job of 50 girls formerly enrolled in special classes of the public schools whose last cash wages were $20 a week or more by age at date of study, intelligence quotient and city*

City and industry of last job	Occupation of last job	Weekly cash wage	Duration of last job	Age at date of study	Intelligence quotient
DETROIT					
Manufacturing and mechanical industries:					
Automobiles	Operating punch press	$25.00	1 year	20	51
	Operating sewing machine	20.00	1 year 11 months	21	54
	Inspecting headlights	21.00	1 year 9 months	21	55
	Sewing springs	20.00	7 days	19	60
	Washing glass	24.00	6 months	18	62
	Core maker	25.00	2 years 2 months	22	63
	Operating soldering machine	20.00	10 months	20	64
	Operating drill press	20.00	1 year 7 months	21	64
	Coremaker	30.00	do	20	66
Tobacco	Bunchmaker	26.00	1 year 6 months	20	49
	Packing tobacco (machine)	21.00	2 years	19	49
	Bunchmaker	25.00	4 years 5 months	20	55
	Do	20.00	1 year 4 months	20	63
	Do	21.00	1 year 8 months	19	64
Electrical supplies	Wrapper	22.28	3 months	21	58
Printing and bookbinding.	Feeding stitcher	21.00	2 years	20	66
Other industries	Sorting tomatoes (hand)	21.00	2 months	20	50
	Bottling vinegar (warehouse)	20.00	4 years 5 months	21	54
	General housework	21.30	25 days	20	57
	Assistant manger	20.50	1 year	21	59
	Elevator operator	20.00	6 days	20	62
	Maid in restroom	21.00	2 days	23	64
	Salesgirl	25.00	1 year 3 months	20	68
	Cleaning automobiles	23.50	21 days	20	85
ROCHESTER					
Manufacturing and mechanical industries:					
Clothing	Felling sleeves (hand)	20.24	1 year 8 months	21	49
	Sewing top collars (machine)	30.00	1 year 9 months	19	52
	Lining pockets (machine)	22.00	[1]	20	56
	Basting canvas (hand)	22.00	3 years 4 months	20	59
	Serging sleeves (machine)	25.00	1 year 2 months	20	62
	Basting patches (hand)	26.50	2 years 1 month	19	62
	Lining maker (machine)	20.00	5 months	21	69
	Basting canvas (hand)	24.00	1 year 5 months	20	69
	Serging pants (machine)	22.00	1 year 10 months	20	70
	Sewing sleeves (machine)	28.00	10 months	20	72
	Padding collars (machine)	22.00	4 months	16	73
	Making vest backs (machine)	30.00	2 years 6 months	19	74
	Making buttonholes (machine).	23.50	11 days	21	78
Kodaks	Inspecting sheet film	21.00	3 months	20	66
Buttons	Shading and grading	21.50	11 months	20	70
	Sorting buttons (hand)	20.00	1 year 2 months	19	71
	Sorting buttons	21.00	1 year	19	76
Shoes	Stitching cut-outs (machine)	28.63	3 months	20	59
	Inspector	21.00	26 days	21	62
Paper boxes	Operating stripping machine	20.00	2 months	19	67
Other industries	Timekeeper	25.00	2 years 3 months	19	57
	Cashier	20.00	[1]	21	70
NEWARK					
Manufacturing and mechanical industries:					
Clothing	Basting canvas (hand)	22.00	4 months	21	54
	Hemstitching (machine)	25.00	1 year	21	61
Metal horns	Assembling (hand)	22.00	3 years 2 months	21	65
SAN FRANCISCO					
Manufacturing and mechanical industries:					
Tobacco	Stripping	22.50	4 months	20	47

[1] Not reported.

TABULAR SUMMARY C.—*Occupation and industry, duration, and weekly cash wages of last job of 88[1] boys who had been out of Illinois institutions for the feeble-minded for a year or more, by age at date of study and intelligence quotient*

Industry of last job	Occupation of last job	Weekly cash wages	Duration of last job	Age at date of study	Intelligence quotient
Manufacturing and mechanical industries:					
Building trades	Laborer	$35.30	15 days	28	47
	Painter	16.00	21 days	26	53
	Helper to plumber	(2)	7 months 14 days	18	59
	Lather	52.00	5 months 23 days	21	60
	Hod carrier	41.25	7 days	18	63
	Truck loading	32.17	1 month	21	76
	Painter's helper	35.10	1 month 25 days	20	79
Electrical supplies	Spraying	24.00	1 year 3 months 26 days.	22	53
	Crating	20.00	2 months	20	56
	Assembling dials	26.00	2 years 5 months 14 days.	19	57
	Assembling fuses	19.00	14 days	20	58
	Assembling coils	26.95	15 days	24	65
	(3)	24.00	5 months 12 days	17	66
	Useful boy	15.00	2 days	21	70
	Mechanic's helper	21.60	1 month 1 day	22	71
	Crating and selecting orders	19.00	4 months 8 days	19	72
Food products	Laborer	20.00	3 years 5 months	23	43
	Oven helper	25.00	4 months	18	57
	Helper to fryer	15.00	21 days	19	61
	Cutting and carrying candy	20.00	21 days	21	61
	Laborer	(3)	(3)	18	65
	Machine operator	22.50	9 months 15 days	17	66
	Trimmer	30.00	9 months 18 days	17	68
	Washing bottles	[4] 25.00	1 month 9 days	19	69
Iron and steel	Helper	33.00	8 months	21	51
	Operating punch press	22.50	2 months	18	52
	Laborer	33.60	1 month	23	58
	Feeding tack machine	19.60	3 years 11 months	19	60
	Rivet heater	28.80	2 months 4 days	18	63
	Helper	30.80	7 months	25	69
	Operating punch press	23.00	1 year 5 months 18 days.	20	73
Printing and publishing.	Carrying pages	16.00	2 months 10 days	19	52
	(3)	25.00	(3)	22	68
Paper boxes	Tying boxes in bundles	12.00	16 days	20	45
Stone monument	Helping carve monuments	25.00	9 months	18	54
Automobile repair	Cleaning and repairing	30.00	2 years 9 months 15 days.	22	54
Cardboard	Helper	22.00	3 years 1 month 2 days.	22	57
Cans	Helper in shipping room	24.75	7 months 21 days	22	57
Wooden boxes	Carrying and placing boxes	22.00	2 years 4 months	25	58
Tents	(3)	16.00	2 months	17	61
Flour	Filling cars	36.00	2 days	20	66
Locomotive repair	Apprentice boilermaker	22.71	3 years 8 months 10 days.	22	76
Lamp-shade frame	Clamping wire to frames	22.50	1 year 6 months	17	78
Oil burners	Packer	27.50	1 month 3 days	22	78
Other industries	Elevator boy	28.00	2 months	26	43
	Helper	(3)	(3)	23	44
	Chauffeur	22.00	6 months	23	44
	Laborer	(3)	(3)	26	44
	Delivering coal	(3)	5 months	22	47
	Delivery boy	12.00	1 month 14 days	19	47
	Cook	(3)	(3)	22	48
	Teamster	36.00	1 year 3 months 24 days.	20	49
	Peddler	[5] 2.00	4 days	19	50
	Handling mail, checking cars	24.00	24 days	20	51
	Digging graves	(3)	3 months	21	51
	Truck driver	20.00	5 years 6 months 27 days.	22	51
	Deck hand	(3)	1 month 15 days	18	54
	Setting up tents	(3)	1 month	22	54
	Delivering ice	(2)	5 months 14 days	26	55
	Chauffeur	28.50	4 months	20	55
	Truck driver	25.00	5 months 29 days	19	55
	Laborer, city parks	24.00	1 month	21	56

[1] 10 boys whose occupation and ind ustry were not reported were excluded from this summary.
[2] Maintenance.
[3] Not reported.
[4] And meals.
[5] And maintenance.
[6] Maintenance and wage.

TABULAR SUMMARY C.—*Occupation and industry, duration, and weekly cash wages of last job of 88 boys who had been out of Illinois institutions for the feeble minded for a year or more, by age at date of study and intelligence quotient*—Continued

Industry of last job	Occupation of last job	Weekly cash wage	Duration of last job	Age at date of study	Intelligence quotient
Manufacturing and mechanical industries—Continued.					
Other industries	Chauffeur	$25.00	5 months 2 days	22	57
	Soldier	(6)	1 year 9 months 16 days.	21	58
	Huckster	(2)	5 months	17	59
	Second-class fireman	[5] 12.47	9 months 4 days	23	59
	Truck driver	20.00	4 months	20	60
	Load and unload cars	28.50	1 year 5 months 14 days.	21	60
	Packing and wrapping	24.00	3 months 22 days	20	60
	Filling in colors	42.50	2 months	23	60
	Helper on truck	20.00	8 days	23	61
	Delivery boy	18.00	10 months 29 days	22	62
	Helper on wagon	18.00	11 days	20	62
	Truck driver	35.00	(3)	24	63
	Helper	17.00	1 month 16 days	21	66
	Washing windows	(3)	(3)	22	66
	Odd jobs	(3)	1 month	20	67
	Shoe shining	33.00	23 days	25	68
	Helper on wagon	26.00	10 days	21	69
	Shipping clerk	35.00	4 years 3 months	23	70
	Singing, cabaret	(3)	1 month	20	74
	Helper	(3)	(3)	22	74
	Taxi driver	25.00	6 months	18	74
	Laborer	22.50	1 month 11 days	21	77
	Truck driver	(3)	(3)	21	81
	Helper	18.00	2 months	22	85
	Stevedore	24.48	4 years 3 months 21 days.	23	(3)
	Chauffeur	60.00	2 years 6 months	27	(3)

[2] Maintenance. [3] Not reported. [5] And maintenance.

TABULAR SUMMARY D.—*Occupation and industry, duration, and weekly cash wages of last job of 16 unmarried girls who had been out of Illinois State institutions for the feeble-minded for a year or more, by age at date of study and intelligence quotient*

Industry of last job	Occupation of last job	Weekly cash wage	Duration of last job	Age at date of study	Intelligence quotient
Manufacturing and mechanical industries:					
Candy	(1)	(1)	10 days	19	56
	Packing chocolates	$14.00	1 month, 14 days	21	58
	Wrapping candy	(1)	1 day	26	60
Paper box	Folding boxes	7.00	1 year	24	35
Switchboard supplies	Operating punch press	20.00	3 years, 1 month, 4 days.	22	45
Meat packing	Casing sausage	21.00	2 years, 17 days	21	52
Tags	Operating tag-cutting machine.	16.80	2 years, 11 months, 20 days.	25	61
Other industries	Housework	[2] 5.77	2 years, 4 months, 5 days.	23	54
	Do	[3] 15.00	1 month, 23 days	22	55
	Do	[4] 10.00	24 days	25	57
	Helping with housework	[5] 5.00	4 months	20	60
	Sales girl	12.00	2 months	27	61
	Housework	[5] 12.00	1 year, 7 days	20	61
	Wrapping	17.00	1 year, 6 months	20	63
	General helper	(6)	6 years, 21 days	22	64
	Nurse's helper	[5] 5.77	6 months	22	66

[1] Not reported. [3] And 1 meal. [5] And board and room.
[2] And maintenance. [4] And 2 meals. [6] Maintenance.

APPENDIX B.—LIST OF REFERENCES

The following is a list, arranged chronologically, of studies and articles that take up the industrial adjustment of persons of subnormal mentality who either have been pupils in special classes (noted by *) for mental defectives or have been patients in institutions for the feeble-minded:

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*THOMAS, HAROLD P.: The Employment History of Auxiliary Pupils between Sixteen and Twenty-one Years of Age in Springfield, Mass. Proceedings and Addresses of the Fifty-second Annual Session of the American Association for the Study of the Feeble-minded, 1928, pp. 132–148.

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