PROGRESS IN SCHOOL OF CHILDREN IN A SAMPLE OF FAMILIES IN THE EASTERN HEALTH DISTRICT OF BALTIMORE, MARYLAND

MARGUERITE KELLER[1]

THE longitudinal observation of families for purposes of studying disease and ill health among their members afforded the opportunity to study also the progress of children in their school work in relation to their health status and other social factors. This paper presents data for children aged 6–16 in a sample population observed from three to five years in the Eastern Health District of Baltimore.

DATA AND METHOD OF STUDY

During a five-year period, June, 1938 to May, 1943, the Public Health Service and the Milbank Memorial Fund conducted a study of illness in a sample of families in the original Eastern Health District of Baltimore, Maryland. The method of sampling in this particular study has been described in detail in a previous report (1). White families living in thirty-four city blocks formed the sample population. The plan of the study was to follow families that lived in a group of houses in certain blocks rather than to follow a selected group of families. No attempt was made to continue visiting families which moved out of these houses during the period of the study, but the new families that moved into the houses vacated in the sample blocks were included in the study. The record of illness started with the first visit to the family and each family was visited once a month thereafter.

In addition to inquiry concerning illness, the family informant was asked about the progress in school of each school-age child in the family. On each visit information was sought as to whether the child was in school or had stopped school. If the child stopped school during the school term the reason for dropping out of school was obtained. At the end of each school

[1] From the Milbank Memorial Fund.

term a record was made as to whether the child passed from one grade to another, failed or was transferred to a school for special instruction.

The children aged 6–16 in the sample of families studied in the original Eastern Health District attended eight different public schools and three parochial schools. One of the public schools was for subnormal children and the curriculum included only occupational instruction. In addition, four of the public schools included what was termed as "opportunity classes." These classes were for children with some mental retardation. One public school was for high school students only, that is, it included grades nine to twelve.

The record for each school child was obtained from the family informant. It included the name or number of the school and the grade in which the child was enrolled.

The population presented in this analysis includes all children aged 6–16 who were observed two years or longer.

Table 1. Male and female children aged 6–16, classified according to their school status during observation. Eastern Health District of Baltimore, 1938–1943.

School Status of Child	Both Sexes	Male	Female
	PER CENT		
Total	100.0	100.0	100.0
Satisfactory	72.4	70.7	74.3
Unsatisfactory			
Failed in School	21.8	24.5	18.7
Stopped School	3.1	2.6	3.6
Opportunity Class[1]	2.7	2.2	3.4
	NUMBER		
Total	1,209	648	561
Satisfactory	875	458	417
Unsatisfactory			
Failed in School	264	159	105
Stopped School	37	17	20
Opportunity Class[1]	33	14	19

[1] Special class for children who are considered retarded in their school work.

Certain Characteristics of the School Children

A record of school status, that is, the standing of the child with respect to progress or failure in school, was obtained for five years in the study in the Eastern Health District of Baltimore. It is of interest to compare certain characteristics of the children who were promoted regularly with children who had an "unsatisfactory" school rating.

The children between the ages of 6 and 16 who were observed two or more years were divided into two groups: (1) those with a rating of "satisfactory" school progress, and (2) those with a rating of "unsatisfactory" school progress.

The satisfactory school progress group consisted of children who had passed from one school grade to a higher grade each year of observation or who had been promoted each year until the time they reached the school-leaving age, or who were promoted while attending vocational school.

The unsatisfactory school progress group included: (1) those who failed in one or more years, (2) those who stopped school or were not in school because of illness or mental deficiency,[2] and (3) those who were transferred to an opportunity class.

A total of 1,209 children aged 6–16 were studied. Of these, 875 were classed as having a satisfactory school status. The remaining 334 were in the group classed as having an unsatisfactory school status. Table 1 shows the distribution of the male and female children classified according to their school status during observation. A slightly higher per cent of the females than of the males were in the group which had a satisfactory school rating, 74 per cent compared to 71 per cent. On the other hand, 25 per cent of the males failed in school compared with 19 per cent of the females. The difference between these latter per cents is statistically significant.[3] A rela-

[2] Disabled and institutionalized children were included in this group.

[3] The standard error of the difference between per cents was the test used. (2) The formula is:

$$\sigma d = \sqrt{PQ\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}$$

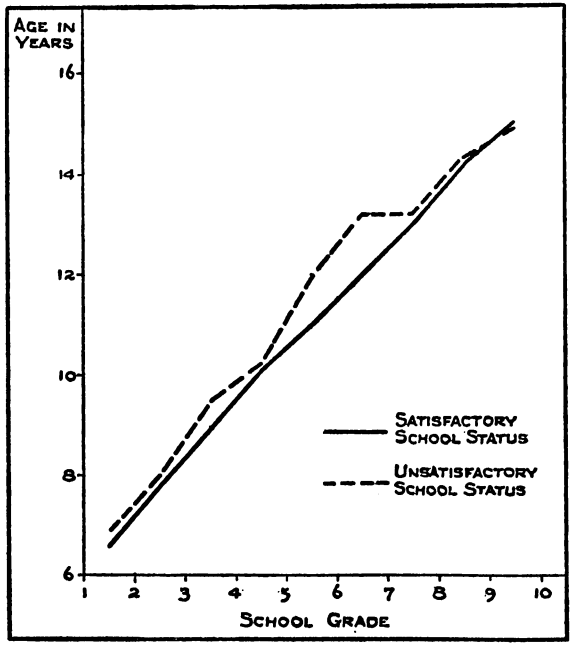
School Grade First Year of Observation	First Quartile	Median	Third Quartile	First Quartile	Median	Third Quartile
	Satisfactory School Status			Unsatisfactory School Status		
First	6.01	6.56	7.16	6.20	6.86	7.49
Second	7.27	7.84	8.40	7.59	8.25	8.98
Third	8.30	8.92	9.46	8.63	9.50	10.38
Fourth	9.64	10.14	10.91	8.16	10.20	11.94
Fifth	10.33	11.02	12.03	10.19	12.00	13.13
Sixth	11.42	12.02	12.67	11.75	13.21	13.39
Seventh	12.20	12.96	13.83	12.75	13.22	14.00
Eighth	13.63	14.18	14.87	13.70	14.30	14.90
Ninth	14.27	15.03	15.75	14.00	14.90	15.50

Table 2. Median age of children with a satisfactory or unsatisfactory school status, classified according to their school grade as of the first year of observation. Eastern Health District of Baltimore, June, 1938–May, 1943.

tively small proportion of children in each sex group stopped school or were transferred to an opportunity class.

Age. The median age in years of children classified according to grade as of the first years of observation and according to school status during observation is presented in Table 2 and Figure 1. In each grade the children who were given an unsatisfactory school rating tend to be somewhat older than those who were promoted regularly. A relatively small number of children studied attended

Fig. 1. Median age in years of children of a satisfactory and an unsatisfactory school status according to their school grade as of their first year of observation. Eastern Health District of Baltimore, June, 1938–May, 1943.



Relationship to the Head of Household	School Status of Child	
	Satisfactory	Unsatisfactory
	Per Cent	
Total	100.0	100.0
Child	88.8	87.7
Stepchild	2.6	4.8
Adopted Child	0.4	0.0
Grandchild	5.0	5.4
Other Relationship	3.2	2.1

Table 3. Distribution of children aged 6–16, classified according to relationship to the head of the household and to school status of child, Eastern Health District of Baltimore, June, 1938–May, 1943.

high school; consequently the median ages for grades 10 to 12 are not shown.

Relationship to Head of Household. Table 3 shows the distribution of school children whose school progress was satisfactory and those whose progress was unsatisfactory, classified according to their relationship to the head of the household. Approximately the same proportion in the two groups were children of the head of the household; 89 per cent in the group of children who had a satisfactory school rating and 88 per cent in the unsatisfactory group. The proportion of stepchildren in the group of children classed as having an unsatisfactory school status was higher than that found in the satisfactory school status group for both sexes, 4.8 per cent compared to 2.6 per cent. This difference was not found to be significant at the 5 per cent level of confidence.

Asthma and Hay Fever. Table 4 shows the prevalence of asthma and hay fever among male and female children according to their school status during observation. Among male and female children in the unsatisfactory school status group the prevalence of persons with asthma and hay fever was higher than in the group of children who had a satisfactory school rating with the exception of asthma among the females. When the sexes are combined, the prevalence of both asthma and hay fever was found to be considerably higher among the

Classification	School Status of Child		
	All Children	Satisfactory	Unsatisfactory
	Rate Per 1,000 Population		
	BOTH SEXES		
Asthma	19.9	17.1	26.9
Hay Fever	7.4	5.7	12.0
	MALE		
Asthma	30.9	26.2	42.1
Hay Fever	9.2	8.7	10.5
	FEMALE		
Asthma	7.1	7.2	6.9
Hay Fever	5.3	2.4	13.9

Table 4. Prevalence of asthma and hay fever among male and female children aged 6–16, according to their school status during observation. Eastern Health District of Baltimore, June, 1938–May, 1943.

children classified as having an unsatisfactory school progress rating. The difference in these rates was found at the 5 per cent level to be statistically significant.[4]

Other Chronic Conditions. The prevalence of chronic illness among children according to their school status during observation is shown in Table 5. There was a consistently higher rate of each type of chronic illness among the children in the unsatisfactory school status group than among those in the group of children who were promoted regularly. The differences all proved to be statistically significant. The difference in the prevalence of rheumatic fever[5] among the children for the two groups was especially high: 62.9 cases per 1,000 population in the unsatisfactory school status group and 20.6 cases per 1,000 population in the group of children who had a satisfactory school rating.

[4] The standard error of the difference between rates was the test used. (2) The formula is:

$$\sigma d = \sqrt{PQ\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}$$

[5] Persons who had a history of rheumatic fever at some time but no illness from it during observation were excluded.

Type of Chronic Condition	School Status of Child		
	All Children	Satisfactory	Unsatisfactory
	Rate Per 1,000 Population		
Rheumatic Fever	32.3	20.6	62.9
Behavior Problem	9.1	8.0	12.0
Mental Deficiency	14.1		50.9
Mental Retardation	3.3	1.1	9.0
Heart Disease	4.1	3.4	6.0
Other Chronic Disease	10.8	2.3	32.9

Table 5. Prevalence of chronic illness among children aged 6–16, according to their school status during observation. Eastern Health District of Baltimore, June, 1938–May, 1943.

From the data presented it is apparent that there was a striking relationship between prevalence of hay fever, asthma, and other chronic illness among the children aged 6–16 and the standing of these children with respect to progress or failure

Table 6. Annual incidence of respiratory and of total illness among children aged 6–16, classified according to school status and by age group.[1] Eastern Health District of Baltimore, June, 1938–May, 1943.

Classification	School Status of Child		Ratio Unsatisfactory
	Satisfactory	Unsatisfactory	
	Rate Per 1,000 Person Years		Satisfactory
	ALL AGES		
All Illness	1,169.4	1,583.2	1.35
Respiratory Illness	584.7	627.4	1.07
	AGE 6–9		
All Illness	1,625.7	1,848.6	1.14
Respiratory Illness	804.8	720.3	.90
	AGE 10–13		
All Illness	1,067.5	1,538.9	1.44
Respiratory Illness	535.2	612.0	1.14
	AGE 14–16		
All Illness	838.5	1,046.6	1.25
Respiratory Illness	425.5	439.3	1.03

[1] Children permanently disabled are excluded.

in school. It may be inferred that the presence of a chronic illness may cause frequent absence from school, even a prolonged absence from school or transferral to an opportunity class. Thus, such conditions may be important factors contributing to failure in school.

Acute Illness. Table 6 presents the annual incidence of respiratory and of total illness among children aged 6–16, classified according to age group and school status. The children who were permanently disabled were excluded from the population. From these data it may be seen that the rates of total illness were generally higher among the children classed as having an unsatisfactory school status than among those in the satisfactory school status group for each age classification. When the ages are combined, the rate of total illness among the children having an unsatisfactory school status was 35 per cent higher than the rate among children having a satisfactory school status. The incidence of respiratory illness was quite similar for the two school status groups. Respiratory illness is not selective; it is found in families regardless of the school status of the children.

It has been shown that the prevalence of asthma, hay fever, and chronic illness as well as the annual incidence of total illness may have some influence on the school status of the child. Minor illness such as respiratory illness does not show this relationship.

Socio-Economic Characteristics of the Families

The 1,209 school-age children included in this analysis came from 684 families. It is of interest to learn whether there were important differences among the families whose children had a satisfactory school status when compared to those whose children had an unsatisfactory school rating. Socio-economic characteristics of the two groups of families were considered. Thus an analysis was made of mobility, amount of family income, home ownership, and amount of living space or degree of crowding, size of family, the education and occupation of the head of the household.

Moving Status of Family	School Status of Children					
	Total	Satisfactory	Unsatisfactory	Total	Satisfactory	Unsatisfactory
	Per Cent			Number of Families		
Total	100.0	100.0	100.0	684	437	247
Stable	61.8	62.7	60.3	423	274	149
Mobile	38.2	37.3	39.7	261	163	98

Table 7. Families classified according to moving status of family and school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.

Mobility. The two groups of families were first considered as to mobility. It can be seen from Table 7 that there was little difference between the two groups in the proportion of families which moved. Slightly over a third of each group moved at some time during the study.

Income. The mean annual income for each group of families is presented in Table 8. The mean annual income, $1,699, of the families with children who were promoted regularly was significantly higher than the mean income $1,547, of the families whose children had an unsatisfactory school status.[6] The

Table 8. Mean family income according to school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.[1, 2]

School Status of Children	Mean Annual Income	Standard Error of Mean	Standard Deviation	Number of Families
Satisfactory	$1,699	± 42.49	802	356
Unsatisfactory	$1,547	± 54.61	751	189

[1] For the satisfactory school status group, 18 families which have received relief, 1 family which had an income over $5,000, and 62 families having unknown income were excluded.

[2] For the unsatisfactory school status group, 26 families which have received relief, 2 families which had incomes over $5,000, and 30 families having unknown income were excluded.

[6]

	Mean	Difference	Standard Error of Difference	
Satisfactory School Status	$1,699	$152	$69.19	t = 2.19
Unsatisfactory School Status	$1,547			

(Continued on page 400)

Ownership of Home	School Status of Children					
	Total	Satisfactory	Unsatisfactory	Total	Satisfactory	Unsatisfactory
	Per Cent			Number		
Total	100.0	100.0	100.0	684	437	247
Families Owned Homes	53.4	58.6	44.1	365	256	109
Families Rented Homes	46.6	41.4	55.9	319	181	138

Table 9. Distribution of families according to home ownership and school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.

distribution of the families by income group is shown in Appendix Table 2. It is interesting to note that 12 per cent of the families whose children had an unsatisfactory school status received public assistance while less than 5 per cent of the satisfactory school progress group had some public assistance.

Home Ownership. Table 9 presents the distribution of the two groups of families according to home ownership. Again there was a definite difference between the families whose children had a satisfactory school status and those whose children were not promoted regularly in school. Fifty-nine per cent of the families whose children had a satisfactory school status owned their home compared with 44 per cent of the families whose children had an unsatisfactory school status. It would be expected that the group with the higher mean annual income would also have a larger proportion of home owners.

Crowding. Each family was given a crowding rating; that is, each was graded as to the number of rooms in relation to the number, age, and sex constitution of the family or household members. There were four categories: (1) more than adequate, (2) adequate, (3) unsatisfactory, and (4) very un-

The standard error of the difference between means was the test used and the value for "t" was obtained by computing the ratio of the difference between means to the standard error of the difference between means. (3)

$$\sigma d = \sqrt{\frac{\sigma^2}{M_1} + \frac{\sigma^2}{M_2}}$$

satisfactory. The description of these categories is as follows:

1. More than adequate: More than one room for sleeping per person or per married couple plus two additional rooms (for living room and kitchen).
2. Adequate: One room for sleeping per person or for each two persons of eligible age and sex plus two additional rooms (for living room and kitchen).
3. Unsatisfactory: One room for sleeping for each two persons of eligible age and sex, plus one additional room for kitchen.
4. Very unsatisfactory: Less than one room for sleeping for each two persons of eligible age and sex, plus additional room for kitchen.

In Appendix 3 there is a further description of what is meant by eligible age and sex groups for room sharing. The crowding rating is an attempt to arrive at a more sensitive index than is afforded by ratings based on number of persons per room.

It is evident from Table 10 and Figure 2 that the families or households whose children were classed as having a satisfactory school status had higher proportions of "adequate" and "more than adequate" living space than did the families whose children had an unsatisfactory school status. For example, 32 per cent and 36 per cent of the families whose chil-

Table 10. Distribution of families according to crowding rating and school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.

Crowding Rating of Family	School Status of Children					
	Total	Satisfactory	Unsatisfactory	Total	Satisfactory	Unsatisfactory
	Per Cent			Number		
Total	100.0	100.0	100.0	684	437	247
More Than Adequate	29.7	32.3	25.1	203	141	62
Adequate	34.2	35.9	31.2	234	157	77
Unsatisfactory	21.2	20.6	22.3	145	90	55
Very Unsatisfactory	14.9	11.2	21.4	102	49	53

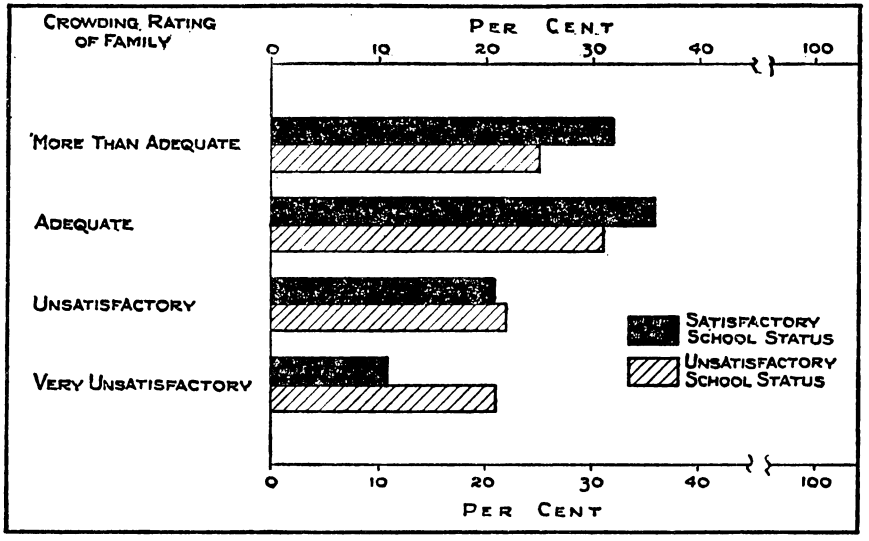


Fig. 2. Distribution of families by their crowding rating. Eastern Health District of Baltimore, June, 1938–May, 1943.

dren were promoted regularly in school were considered "more than adequate" and "adequate," respectively, while only 25 per cent and 31 per cent of the families with children classed as having an unsatisfactory school progress were so rated. Combining the families in the "adequate" and "more than adequate" living space classifications, the difference between the two groups is found to be statistically significant.

From the above analysis, it would certainly seem that amount of income, home ownership, and adequacy of living space may have had some influence upon the school status of the children.

Size of Family. Table 11 shows the median size of the families at the time of first observation arrayed according to the age of the head of the household. The families whose children had an unsatisfactory school rating were larger for nearly all age groups of household heads. In both of the two school status groups the size of family tends to increase as the age of the head of the household increases.

Education of Household Head. The differences in educational attainment of family heads of household were not great

Age Group of Head of the Household	First Quartile	Median	Third Quartile	First Quartile	Median	Third Quartile
	School Status of the Children in the Family					
	Satisfactory			Unsatisfactory		
All Ages	3.67	4.54	5.60	3.93	5.05	6.70
20–24	2.92	3.33	3.88	3.50	4.00	4.50
25–29	3.38	4.25	5.33	3.13	4.00	6.00
30–34	3.26	3.98	4.76	3.68	4.29	5.29
35–39	3.68	4.62	5.25	4.00	5.61	6.94
40–44	3.88	4.74	5.92	3.86	5.07	6.50
45–49	3.97	4.97	6.57	4.00	5.50	5.35
50–54	3.69	4.29	5.45	4.82	5.80	7.88
55–59	4.06	5.43	6.31	5.63	6.25	7.00
60–64	4.00	5.70	6.75	3.75	5.00	6.25
65+	3.63	4.50	6.00	3.75	4.50	6.25

Table 11. Median size of families classified according to school status of one or more children in the family and according to the age group of the head of the household. Eastern Health District of Baltimore, June, 1938–May, 1943.

when the two school status groups are compared (Table 12). The families whose children had an unsatisfactory school rating had a slightly higher proportion of heads of the household who

Table 12. Distribution of families according to education completed by the head of the household and school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.

Education Completed by Head of Household	School Status of Children					
	Total	Satisfactory	Unsatisfactory	Total	Satisfactory	Unsatisfactory
	Per Cent			Number		
Total	100.0	100.0	100.0	684	437	247
Fourth Grade or Less[1]	16.8	14.9	20.0	105	60	45
Fifth–Eight Grades	63.3	63.0	64.0	397	253	144
High School[2]	17.7	18.9	15.6	111	76	35
College or Professional	2.2	3.2	0.4	14	13	1
Education Unknown				57	35	22

[1] Including special school for handicapped.
[2] Including vocational school and business school.

Employment Status of Head of Household	School Status of Children					
	Total	Satisfactory	Unsatisfactory	Total	Satisfactory	Unsatisfactory
	Per Cent			Number		
Total	100.0	100.0	100.0	684	437	247
Employed	85.5	87.0	83.0	585	380	205
Seeking Work	4.2	3.0	6.5	29	13	16
Retired or Home	0.6	0.7	0.4	4	3	1
Disabled	3.1	3.4	2.4	21	15	6
Housewife	6.3	5.9	6.9	43	26	17
Institution	0.3	—	0.8	2	—	2

Table 13. Distribution of families according to employment status of the head of the household and school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.

had not completed the fourth grade than did those with children receiving a satisfactory school status, 20.0 per cent compared with 14.9 per cent. On the other hand, the group of families whose children had passed regularly in school had a slightly higher proportion of heads with college and professional training, 3.2 per cent compared with 0.4 per cent. The two middle classifications of school attainment showed great similarity between the two groups.

Employment Status and Occupation of Head of Household. The distribution of the heads of the household according to employment status is presented in Table 13. Again there was little difference noted between the two groups. In the group of families whose children were promoted regularly, 87 per cent of the heads of the household were employed while 83 per cent were employed in the group of families whose children had an unsatisfactory school status. The percentage of heads of the household seeking work was somewhat higher for the group of families whose children had an unsatisfactory school status. When the employed heads of the household were classified according to occupational class, Table 14, the two distributions were quite similar.

From these data it can be seen that school status of children in this study may be associated with the following socio-eco-

Occupation of Head of Household	School Status of Children					
	Total	Satisfactory	Unsatisfactory	Total	Satisfactory	Unsatisfactory
	Per Cent			Number		
Total	100.0	100.0	100.0	585	380	205
Managers and Proprietors	13.7	13.7	13.7	80	52	28
Clerical and Salesmen	9.0	8.9	9.3	53	34	19
Skilled Workers	28.9	29.5	27.8	169	112	57
Semiskilled Workers	29.6	28.4	31.7	173	108	65
Unskilled Workers	8.4	8.7	7.8	49	33	16
Protective and Service Workers	10.4	10.8	9.7	61	41	20

Table 14. Distribution of all employed heads of households according to their occupational class and school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.

nomic characteristics of the family: income, home ownership, crowding, and size of family. There was apparently no relationship between the children's school status and family stability or to the education or employment status of the head of the household.

Summary

A study of certain characteristics of school children and of socio-economic characteristics of their families has been presented from data reported in the sample population studied in the Eastern Health District of Baltimore during the period June, 1938 to May, 1943. The children between the ages of 6 and 16 who were observed two or more years were divided into two groups: (1) those with a rating of satisfactory school progress, and (2) those with a rating of unsatisfactory school progress.

Eight hundred and seventy-five children from 437 families composed the satisfactory school progress group, while 334 children from 247 families were in the unsatisfactory school progress group.

A slightly higher per cent of the females than of the males were in the group which had a satisfactory school rating. On the other hand, a significantly higher per cent of the males failed in school than did the females.

In each grade the children who were given an unsatisfactory school rating tended to be somewhat older than those who were promoted regularly.

The distribution of children classified according to their relationship to the head of the household was quite similar for the children whose school progress was satisfactory and for those who had an unsatisfactory school status.

The prevalence of asthma and hay fever for both sexes was considerably higher among the children classified as having an unsatisfactory school progress rating than among the children in the satisfactory school status group, 38.9 per 1,000 population compared to 22.8 per 1,000 population.

There was a consistently higher rate of each type of chronic illness among the children in the unsatisfactory school status group than among those who were promoted regularly. The difference in the prevalence of rheumatic fever among the children for the two groups was especially high.

The incidence of respiratory illness was quite similar for the two school status groups.

The socio-economic characteristics of the families whose children had a satisfactory school status were compared to those whose children had an unsatisfactory school rating.

There was little difference between the two groups in the proportion of families which moved during the study.

The mean annual income, $1,699, of the families with children who were promoted regularly was significantly higher than the mean income, $1,547, of the families whose children had an unsatisfactory school status.

A higher per cent of the families whose children had a satisfactory school status owned their homes compared with families whose children had an unsatisfactory school status, 59 per cent and 44 per cent, respectively.

The families were rated as to the degree of crowding in their homes; that is, each was graded as to the number of rooms in relation to the number, age, and sex constitution of the family. The families whose children were classed as having a satisfactory school status had higher proportions of "adequate" and "more than adequate" living space than did the families whose children had an unsatisfactory school status.

The families whose children had an unsatisfactory school status were larger for nearly all groups classified by the age of household heads, than of the families whose children were promoted regularly. There were only slight differences in educational attainment of family heads of the household when the two school status groups were compared. The distribution of the heads of household according to employment status showed little difference between the two school status groups.

It is apparent that there were striking differences in the prevalence of hay fever, asthma, and other chronic illness among the children aged 6–16, classified by their standing with respect to progress or failure in school. It was also concluded that amount of income of the head of the household, home ownership, and adequacy of living space may have had some influence upon the school status of the children.

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Appendix Table 1. Distribution of children aged 6–16 classified according to their school grade as of first year of observation and school status during observation.[1] Eastern Health District of Baltimore, June, 1938–May, 1943.

School Grade First Year Observed	School Status of Child		
	All School Children	Satisfactory	Unsatisfactory
	Number		
Total	1,026	760	266
First	127	82	45
Second	102	65	37
Third	106	78	28
Fourth	102	77	25
Fifth	109	83	26
Sixth	97	74	23
Seventh	101	67	34
Eighth	85	73	12
Ninth	60	48	12
Tenth	42	38	4
Eleventh	20	18	2
Twelfth	3	3	0
Opportunity Class	19	4	15
Vocational School	46	45	1
Other and Unknown	7	5	2

[1] Excludes 183 children who became 6 years of age during their observation.

Income Class as of the First Year Observed	School Status of Children			
	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory
	Per Cent		Number	
Total	100.0	100.0	437	247
Relief	4.8	12.0	18	26
$499 or Less	2.9	1.8	11	4
500– 999	12.5	17.5	47	38
1,000–1,499	27.4	23.0	103	50
1,500–1,999	24.3	24.0	91	52
2,000–2,499	16.0	12.0	60	26
2,500–2,999	5.9	6.5	22	14
3,000–3,999	5.1	1.8	19	4
4,000–4,999	0.8	0.5	3	1
5,000 and Over	0.3	0.9	1	2
Unknown Income			62	30

Appendix Table 2. Annual income of families classified according to school status of one or more children in the family. Eastern Health District of Baltimore, June, 1938–May, 1943.

Appendix 3

Instructions (crowding rating) given for determining suitable age and sex for sharing a sleeping room were as follows:

1. Sex: One sleeping room for two persons of opposite sex is considered suitable if the two persons are married or if both are under 6 years of age.

2. Age: (a) A separate sleeping room is to be allowed for infants under 2 years of age, except where there is more than one infant under 2.

(b) Two persons under 20 years of age who are of the same sex may share the same sleeping room if there is less than six years difference in their ages.

(c) Two adults who are 20 years of age or older and of the same sex may share the same sleeping room if there is less than fifteen years difference in their ages.

(d) An adult who is 20 to 25 years of age may share a room with a younger person of the same sex if there is less than six years difference in their ages.

3. Lodgers: A separate room is to be allowed for each lodger of different sex, unless a married couple. Related lodgers will be treated in the same way as family members, except that no allowance will be made for a separate living room and kitchen for lodgers.