to consider the psychological and educational problems of imbecile children and who has throughout the present study given us encouragement, criticism, and support, and to Dr. Cyril Williams, of the Fountain Hospital, who has been closely associated with the study at every stage.

REFERENCES

- Carter, C. O. (1958). *J. ment. Defic. Res.*, 2, 64.
 Clarke, A. D. B., and Hermelin, B. F. (1955). *Lancet*, 2, 337.
 Curtis Committee (1946). *Report of the Care of Children Committee*. London, H.M.S.O.
 Home Office (1955). *7th Report on the Work of the Children's Department*, Appendix 5. H.M.S.O., London.
 Lewis, H. (1954). *Deprived Children*. Oxford Univ. Press, London.

TELEVISION-VIEWING HABITS OF CHILDREN WITH AND WITHOUT DEFECTS OF VISION

BY

L. H. G. MOORE, M.B., Ch.B., D.O.M.S.
Ophthalmic Surgeon, Dudley, Worcestershire

During the past year schoolchildren who attended the central clinic in Dudley for an eye examination were asked how long they had had a television set and how many hours in each week they viewed the programmes. The ages of the children ranged from 7 to 18, and 496 consecutive patients were questioned.

In order to compare these figures with a control group, the help of the teachers of several Dudley schools was sought. The same two questions were put to every child who had been medically examined at school within the previous 12 months, whose recorded vision was 6/6 in each eye, and who had not complained of any discomfort that would have warranted a visit to the eye clinic. The number of children questioned at school was 816.

Table I shows the viewing habits of the two groups of children. The type of refractive error found is shown in Table II, and in Table III the type of refractive error is correlated with the number of viewing hours. The total numbers of hours of television viewing were calculated for each child from the product of the number of hours in a week the child viewed and the length of time the family had had a television set.

The population of the Borough of Dudley is 64,530. The school population is 11,024. The total attendance of schoolchildren at the eye clinic in 1958 was 1,130, and 125 of these attended more than once; therefore the total number attending in the year was 1,005. The maximum period marked on the child's record card before re-examination is one year.

These figures show that there is no basis for the assumption that prolonged television viewing is

TABLE I.—*Viewing Habits of 496 Schoolchildren with a Defect of Vision and of 816 with No Defect*

Total No. of Hours	Children with Visual Defects		Control Group	
	No.	%	No.	%
0-1,000	187	37.70	214	26.22
1,001-2,000	101	20.36	122	14.94
2,001-3,000	85	17.13	170	20.83
3,001-4,000	35	7.05	98	12.00
4,001-5,000	35	7.05	84	10.29
5,001-6,000	18	3.62	53	6.49
6,001-7,000	14	2.82	34	4.16
7,001-8,000	8	1.61	17	2.08
8,001-9,000	5	1.00	10	1.22
9,001-10,000	6	1.20	4	0.49
10,001-11,000	2	0.40	1	0.12
11,001-12,000	0	0.00	6	0.73
Over 12,000	0	0.00	3	0.36

TABLE II.—*Errors of Refraction in 496 Schoolchildren*

Refraction	No. of Eyes	Percentage
Hypermetropia and astigmatism	188	18.95
Hypermetropia	162	16.33
Hypermetropic astigmatism	91	9.17
Emmetropia	69	6.95
Mixed astigmatism	64	6.45
Myopic	30	3.02
Myopia	249	25.10
Myopia and astigmatism	137	13.81
1 Aphakia. 1 Prosthesis	2	0.2

responsible for an increase in errors of refraction in children. The number of cases of myopia does not appear to increase as the number of viewing hours rises. The figures of errors of refraction closely follow those reported by McNeil (1955) from the school eye clinic at Barnsley in 1953. He found that between the ages of 10 and 15 half the cases reported for the first time were myopes.

The average age of all the children with visual defects in our survey was 11.6 years. The age of the children in the control group must have been very similar, because these 816 children had all had their second school medical examination within the previous 12 months and had been recorded as having no defect of vision. They were therefore all over 10 years of age and under 12.

The B.B.C. television service in the Midlands began in 1949, and has so far broadcast for more than 25,000 hours. The television service in Barnsley began in October, 1951. The pattern of development of errors of refraction does not appear to have been altered by the impact of television.

I am grateful for the co-operation received from Dr. R. M. Ross, the Medical Officer of Health, and his staff, and from Mr. H. W. Eisel, the Director of Education, and his teachers. I thank Dr. R. M. Archer for his help in the clinics, and Mrs. G. Beech, our school nurse.

REFERENCE

McNeil, N. L. (1955). *Brit. J. Ophthalm.*, 39, 688.

TABLE III.—*Error of Refraction in 990 Eyes in 496 Schoolchildren Correlated with Viewing Habits*

Refraction	No. of Hours of Television Viewing										
	0-1,000	1,001-2,000	2,001-3,000	3,001-4,000	4,001-5,000	5,001-6,000	6,001-7,000	7,001-8,000	8,001-9,000	9,001-10,000	10,001-11,000
Hypermetropia and astigmatism	76	38	23	9	18	8	6	3	2	5	0
Hypermetropia	74	26	35	6	8	5	3	1	1	3	0
Hypermetropic astigmatism	35	20	14	8	4	0	5	0	3	0	2
Emmetropia	21	23	9	3	7	2	2	2	0	0	0
Mixed astigmatism	22	15	10	8	6	2	1	0	0	0	0
Myopic	15	9	0	2	0	2	1	1	0	0	0
Myopia	81	50	55	20	15	11	5	3	4	4	1
„ and astigmatism	49	21	24	13	12	6	5	6	0	0	1