RECENT RESEARCH IN DYSLALIAS.

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1. INTRODUCTION.

In 1937 the Cape Education Department introduced free lessons in speech correction for primary school children, and today there are ± 32 speech correction teachers throughout the Cape Province giving lessons to ± 2000 speech defective school children in eight cities and towns. Lessons are given twice weekly, each of about thirty minutes in duration. This investigation has been based on the experiences and results obtained by these speech correction teachers.

It is the aim of this investigation to determine whether there is any significant difference in the time taken by children at different age levels to complete a course in speech correction for functional dyslalia. This study is concerned only with children of normal intelligence who have one sound only defective in their speech, not resulting from any organic lesion, who have received lessons in speech correction over an uninterrupted period. This study also aims at discovering whether some defective sounds are more quickly corrected than others.

11. SUBJECTS.

The 350 speech defective children included in this study were all attending primary schools in the Cape Province, and receiving special lessons in speech correction, each of ± 30 minutes in length, at their schools twice weekly. There were 193 boys and 157 girls ranging in age from 5 to 12 years inclusive, and from Sub Std. A until Std. VI inclusive. This study does not include children from special classes.

111. PROCEDURE.

The speech correction teachers who co-operated in this investigation were asked to supply the following information as regards each of their pupils: name, sex, defective sound, age on admission to speech correction class, and duration of speech correction lessons. In addition each pupil was interviewed three months or longer after

dismissal to ensure that no relapse had occurred.

1V. RESULTS AND CONCLUSIONS.

TABLE 1.

DEFECTIVE SOUND	NUMBER OF PUPILS
5	212
~ or ~	71
0/1	67

It was found that among 350 primary school children having only one defective sound, (functional dyslalia), the sound 5 was defective among 212 children, the sound 7 was defective in 71 children, and the sound 6/3 was defective in 67 children. Margaret Hall (2) in her study of "Auditory Factors in Functional Articulatory Speech Defects", has also found these three sounds 5,7,6/4 to be among those most frequently mispronounced.

The following table illustrates the results obtained when the subjects were classified according to age.

TABLE 11.

AGE IN YEARS	NO. OF PUPILS
5 6 7 8 9 10 11 12	21 79 82 68 37 34 16 13
TOTAL	350

These results agree with those obtained by Roe and Milisen (4) in their investigation on "The Effect of Maturation upon Defective Articulation in Elementary Grades". They found among their subjects in similar schools in Indiana, U.S.A., that the mean number of errors decreased between the first and the sixth grades, i.e. between the ages of 6 and 11 years, as the grade level increased. The small number of dyslalic

pupils at the 5 year old level can be explained by the fact that these children are not all at school yet. Similar results have also been obtained by Maralyn Wight (6) in Ypsilanti, Michigan.

As regards the time taken to complete the lessons in speech correction, it was found that the 350 children took on the average 10 months, (or approximately one school year), from the time they were admitted to speech correction classes, until their dismissal as rehabilitated. Table 111 shows the average time taken by the pupils at each age level to complete their speech correction lessons, the difference in the average time taken by the 7 and 11 year old pupils and the critical ratio.

TABLE 111.

AGE	AVERAGE TIME	DIFFERENCE	CRITICAL RATIO
5 6 7 8 9 10 11 12 7 & 11	9.42 months 9.91 " 10.35 " 10.69 " 9.72 " 9.70 " 7.25 " 8.81 "	3.10 months	2.97

It would thus seem that the most favourable time for children to learn how to articulate a sound correctly and how to incorporate this new and correct sound into their spontaneous speech is at the age of 11 years. Taking into account the small number of pupils in the 11 year old group, there is a significant difference at the 1% level (1) in the time taken by the 7 and 11 year old pupils to complete their lessons, in favour of the older pupils.

Table 1V demonstrates the average times taken by the pupils in learning to correct each of the three defective sounds, the differences between the average times taken and the critical ratios.

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29. TABLE 1V.

SOUND CORRECTED.	AVERAGE TIME	DIFFERENCE	CRITICAL RATIO
or or of sand of the sand of t	11.014 months 10.183 " 7.149 "	0.831 months 3.865 " 3.034 "	0.89 5.95 3.32

Thus there is no significant difference in the time taken to correct the sounds \leq and \angle/τ , (average times taken being 11.014 and 10.183 months respectively), but the sound Θ/\overline{O} (7.149 months), is significantly more quickly corrected than either \leq or \angle (3).

The greater incidence of speech defects among boys than among girls, as reported by the White House Conference, (5) is confirmed by the present investigation.

V. SUMMARY.

- 1. Among 350 primary school children having each only one sound defective in their speech, (functional dyslalia), it was found that there were more boys (193) than girls (157).
- 2. It was found that in all cases one of the following three sounds was defective, 5 (212) 人 or ケ (71) の (67).
- 3. The average time taken by all the subjects between the ages of 5 and 12 years to complete their speech correction lessons was 10 months, the least time taken being by the 11 year old pupils (7.25 months).
- 4. It was found that the sound Θ/Θ was significantly more quickly corrected (7.149 months) than either 5 or 1, but that there was no significant difference in the time taken to correct 5 (11.014 months) and 1 (10.183 months).

BIBLIOGRAPHY.

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- 3. Pearson, Karl, Tables for Statisticians and Biometricians.
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- 5. White House Conference on Child Health and Protection, Report of the Committee on Special Classes. D. Appleton-Century, Co. Inc., New York, 1931.
- 6. Wight, Maralyn. <u>JOURNAL OF SPEECH DISORDERS</u>, September, 1947, page 303.

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CAPE EDUCATION DEPARTMENT.

It is the purpose of this investigation to determine whether there is any significant difference in the time taken by children at different age levels to complete a course in speech correction. This study is concerned only with children of normal intelligence with one simple articulatory defect, (dyslalia,) not resulting from any organic lesion, e.g. cleft palate, hearing loss, who have received lessons in speech correction over an uninterrupted period. This study also aims at discovering whether some defective sounds are more quickly corrected than others.

SUGGESTIONS FOR FILLING IN THE FORM.

SEX: Write M (male) or F (female).

SPEECH DEFECT: This study is concerned only with children

who have only one defective sound. The sound which is defective, together with the sound substituted, should be entered, e.g.

substitutes "w" for "r".

LANGUAGE: State whether the speech correction lessons

were conducted through the medium of Afrikaans

or English or both. (Write A, E or AE.)

Do not include the names of pupils whose

lessons have been interrupted by a break of a term or more owing to change of teacher,

absence of pupil or any other reason.

STANDARD: Write down the names of only those children

who were in ordinary classes both at time of admission and at time of dismissal. Do not include the names of children from special

classes or who were placed in special

classes during the course in speech correc-

tion.

<u>DISMISSAL</u>: This study is concerned only with those

pupils who have been dismissed as rehabili-

tated.

DURATION OF Write in the time in years and months from the admission date until the dismissed date

the admission date until the dismissal date, i.e. the actual time taken for the course

in speech correction.

CHECK UP: In cases where this is possible, state

whether the child's speech is still satisfactory, or whether there has been any re-

lapse.

TEACHER: Write in the name of the teacher who gave

the course in speech correction to the pupil

concerned.

Any number of names of pupils can be entered on the same form, but draw a line right across the page after the name of each pupil.

When you have filled in the forms, please return them to:-

Miss E. Stern, c/o Mrs M. Kihn, Public School, MOWBRAY, Cape Town.

Thank you for the information.