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## ABSTRACT

This paper is a discussion of The Churchill School, founded in 1972 as an alternative approach to serving the educational needs of children diagnosed as hyperactive, hyperkinetic, brain damaged, neurologically impaired, or suffering from minimal brain dysfunction. The school has a student body of 65, ranging between 6 and 13 years of age. The educational program attempts to be holistic in nature, utilizing three programs which present alternatives to drugs for the treatment of hyperactive children. The first program, perceptual-motor training, is eclectic in nature and includes several subcomponents. The second program, orthomolecular medicine, is described, and reference is made to research in megavitamin therapy. The third program, the open classroom approach, is described as an attempt to channel each pupil's hyperactivity into constructive pursuits. Specific curriculum for this program is also discussed. A battery of tests was administered to the pupils during the school's first and second years of operation. Although the results of these tests provided little statistical significance, the author concluded that alternatives to drug treatment for hyperactivity do exist and should be considered. (Author/BW)

The Churchill School: An Alternative to Drug  
Treatment for Hyperactive Children\*

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The use of psychoactive drugs to modify the hyperactivity frequently associated with cerebral dysfunction has become standard medical practice. Hundreds of thousands of American children diagnosed as "hyperactive" are taking these drugs daily because of the reported improvement in their behavior, both at school and at home.

However, some teachers and parents have objected to the use of this medication (especially stimulant drugs such as Ritalin and the amphetamines). Their objections have been raised on the basis of untoward side effects, misdiagnosis, and the refusal of many professional people to consider such alternatives to drugs as behavior modification, individualized instruction, perceptual-motor training, prescriptive teaching, and other special education techniques (Krippner, Silverman, Cavallo, & Nealy, 1974).

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### The Churchill School

One set of alternative approaches is offered by the Churchill School, founded in 1972 to serve the educational needs of children diagnosed as "hyperactive," "hyperkinetic," "brain damaged," "neurologically impaired," or suffering from "minimal brain dysfunction." During the 1972-73 school year, there were 17 children in attendance at the Churchill School.\* The number doubled during 1973-74, and reached 65 for the 1974-75 school year. During its third year of operation, the school's pupils ranged between six and thirteen in age. Classes were non-graded but organized according to age level. There were 16 staff members, including administrative and secretarial employees. An additional eight persons served as consultants or volunteers.

The educational program at the Churchill School attempts to be holistic in nature, utilizing three programs which present alternatives to drugs for the treatment of hyperactive children: perceptual-motor training, orthomolecular medicine, and the open classroom approach to instruction.

1. Perceptual-motor training at the Churchill School is eclectic in nature, drawing upon the work of several writers in the field. However, neurological

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organization (N.O) procedures are given special attention. The rationale for N.O. holds that there are critical periods for the appearance of sensory-motor skills, and that these generally occur in a certain order. Although some children apparently can omit an activity without displaying later handicaps (presumably because they are able to compensate in other ways), most persons will be unable to master higher level skills if the basic, lower level skills have not been mastered (Thomas, 1969). The therapeutic procedures carried out by N.O. rehabilitationists consist of introducing neural patterns (e.g., crawling, creeping, response to sensory-motor stimulation) felt to be omitted during the child's development.

A summary of research with N.O. procedures was presented in 1973 (Krippner, 1973-74). Since that time, an additional study sponsored by the National Association for Retarded Children (anon., 1973) has been reported. The researchers divided "mildly and moderately" mentally retarded residents of a state school into three groups of 24 residents each. The first group at first

received only the motor and visual-motor components of N.O. therapy. Later, the sensory stimulation component was added to the program. The second group initially received a recreation and physical activities program. When the sensory component of N.O. therapy was added to the first group, it was also added to the second group. The third group received no portion of the N.O. program. After several months, specific changes were observed favoring the first experimental group on subtests of visual perception and motor performance for the Illinois Test of Psycholinguistic Abilities. Both experimental groups showed greater gains in overall language development on the same test than did the control group.

The Stanford-Binet Intelligence Scale was used to measure intellectual functioning; no significant differences were observed as a result of N.O. therapy. The study also surveyed 778 families whose children had participated in N.O. programs; 282 families participated in the study. Nine out of 10 families reported some positive change due to the N.O. program and eight out of 10 said they would repeat their experiences.

The typical daily program for pupils at the Churchill School involves two 20-minute periods of crawling and/or creeping, one 20-minute period of visual-motor coordination exercises, one 15-minute period of language stimulation, and one 5-minute period of each of the following activities: visual stimulation, auditory stimulation, tactile-kinesthetic stimulation, and gustatory-olfactory stimulation. Individual differences were taken into account when the original programs were outlined; the procedures were divided between the parents and N.O. rehabilitationists at the school. The program at the school also included clay molding, jigsaw puzzles, tracing, drawing, woodworking, and chalkboard exercises. All tasks were done in such a way as to develop left-to-right progression, crossing the body midline, and integrating a visual sequence with an auditory sequence.

2. An early example of orthomolecular (O.M.) medicine to combat and prevent illness dates back to the serendipitous discovery by oceanic navigators that sailors who had eaten citrus fruits on a regular basis did not develop scurvy because of the

Vitamin C contained in citrus fruits. In the treatment of certain types of schizophrenia, doses of Vitamin B<sub>3</sub> ranging from three to 18 grams per day have been used in combination with other vitamins. As the minimum daily requirements of Vitamin B<sub>3</sub> for most people are under one gram, the massive doses prescribed for schizophrenics became known as the "megavitamin treatment." The rationale held by O.M. physicians is that large amounts of vitamins will enable the body to fulfill its requirements despite the existing disorder; if there is a difficulty in absorbing vitamins, a large dose will enable the body to absorb what it needs, although most of the vitamin would be excreted.

A summary of the research carried out by O.M. therapists with children indicates that the "megavitamin treatment" has been used for schizophrenia, autism, and brain damage. Children at the Churchill School do not automatically receive O.M. therapy. Those who do generally receive one gram (per 50 pounds of body weight) of Vitamin B<sub>3</sub>, one gram of Vitamin B<sub>1</sub>, 200 milligrams of Vitamin B<sub>6</sub>, three grams of Vitamin C, and dietary

alterations to increase the consumption of protein and to decrease the consumption of carbohydrates. Again, individual differences were taken into account; the programs were altered whenever a re-evaluation so indicated.

3. The open classroom movement originated in English primary schools. Its rationale held that children are innately curious and will explore without constant adult direction and supervision. Play cannot be distinguished from work during children's early years. Learning takes place constantly in a responsive and stimulating environment, and not just when the teacher is teaching.

The classrooms of the Churchill School are divided into "interest areas" which contain all the necessary materials for pursuing a particular activity. The teacher works with each pupil to draw up a "contract" each day covering the pupil's assignments. The teacher observes each child's progress carefully to be sure that the "contracts" are prescriptive in nature; a pupil's current work displays strengths and weaknesses that can be used to direct his or her future work. The pupils can fulfill their "contracts" at any point during



the school day. The teacher provides materials, moves from child to child giving assistance as needed, and records each child's progress.

The hyperactivity of each pupil is thus channeled into constructive pursuits. Most learning is done on an individual basis but there are also opportunities (such as the athletic program) for the group to meet as a whole. The curriculum includes mastering of the following skills: reasoning and problem-solving, communication, observing and perceiving, creativity, work-study skills, understanding the world, developing self-confidence, making decisions, group functioning, evaluation, and self-expression. Learning is not only prescriptive but is carried out in an atmosphere in which the pupil is expected to succeed rather than fail, and in which the pupil is regarded as worthwhile and intelligent rather than worthless and stupid. Most of the pupils have negative self-concepts which must be altered before self-directed learning can take place.

#### 1972-1973

The pupils' progress during the Churchill School's first year of operation was evaluated by administering a test

battery to each pupil in September, 1972, and in June, 1973.\* The tests administered included the Bender Motor Visual Gestalt (scored for both accuracy and recall), the Draw-A-Person (scored for mental age), the Roswell-Chall Diagnostic Reading Test (scored for correct responses), and the Wide Range Achievement Tests (Decoding, Spelling, and Arithmetic sections, scored for grade level). All tests except the WRAT were individually administered. Statistically significant differences were observed when the scores were evaluated with  $t$  - test techniques (test/re-test designs, two-tailed):

1. Bender Accuracy  $t = 4.17, p < .01; 15 \text{ df}$
2. Bender Recall  $t = 2.90, p < .05; 15 \text{ df}$
3. Draw-A-Person  $t = 3.66, p < .01; 16 \text{ df}$
4. Roswell-Chall  $t = 4.83, p < .01; 14 \text{ df}$
5. WRAT, Decoding  $t = 3.45, p < .01; 12 \text{ df}$
6. WRAT, Spelling  $t = 4.00, p < .01; 12 \text{ df}$
7. WRAT, Arithmetic  $t = 2.76, p < .05; 12 \text{ df}$

One cannot draw any firm conclusions from these figures because there may have been a learning effect on the tests and because there was no control group of hyperactive pupils receiving an alternate treatment. However, these pupils had

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done very poorly in their previous educational settings.

### 1973-1974

Progress for the pupils during the Churchill School's second year of functioning was measured by three subtests of the McGrath Reading Test: Word Recognition, Oral Reading, and Word Meaning. These subtests were administered to all children between the ages of nine and 13. The scores obtained in September, 1973, were compared to the scores obtained on a different form of the test in June, 1974. Most of the results were statistically significant:

#### 1. Word Recognition Subtest

- a. Total group,  $t = 7.17$ ,  $p < .01$ ; 33 df
- b. 9 yr. olds,  $t = 3.03$ ,  $p < .05$ ; 7 df.
- c. 10 yr. olds,  $t = 7.00$ ,  $p < .01$ ; 5 df
- d. 11 yr. olds,  $t = 4.32$ ,  $p < .01$ ; 7 df
- e. 12 yr. olds,  $t = 3.42$ ,  $p < .01$ ; 7 df
- f. 13 yr. olds,  $t = 0.92$ , n.s.; 3 df

#### 2. Oral Reading Subtest

- a. Total group,  $t = 5.74$ ,  $p < .01$ ; 33 df
- b. 9 yr. olds,  $t = 4.25$ ,  $p < .01$ ; 7 df
- c. 10 yr. olds,  $t = 3.84$ ,  $p < .05$ ; 5 df
- d. 11 yr. olds,  $t = 2.55$ ,  $p < .05$ ; 7 df
- e. 12 yr. olds,  $t = 1.87$ , n.s. ; 7 df
- f. 13 yr. olds,  $t = 2.10$ , n.s. ; 3 df

### 3. Word Meaning Subtest

- a. Total group,  $t = 4.10$ ,  $p < .01$ ; 31 df
- b. 9 yr. olds,  $t = 1.00$ , n.s. ; 6 df
- c. 10 yr. olds,  $t = 3.95$ ,  $p < .05$ ; 5 df
- d. 11 yr. olds,  $t = 1.87$ , n.s. ; 6 df
- e. 12 yr. olds,  $t = 2.39$ ,  $p < .05$ ; 7 df
- f. 13 yr. olds,  $t = 0.39$ , n.s. ; 3 df

Again, no control group was used. However, different forms of the subtests were administered to prevent a learning effect. The lack of significant results among the 13-year-olds is probably due to the small number of pupils in that age group.

### Conclusion

Two academic years at the Churchill School have demonstrated an alternative to drug treatment for hyperactive children. There is no doubt that drugs do assist pupils to control their hyperactivity. However, there are other courses to take for those parents and schools who prefer other procedures for the management of this complex behavioral condition.

References

- Anonymous, 1973. NARC report on study of sensori-motor training (Doman-Delacato) is favorable. Expectations, May-June.
- Barth, R. S., 1973. Should we Forget about Open Education? Saturday Review/World, Nov. 6.
- Garnett, K., & Donnell, S., 1972. Prospectus for the Churchill School. New York: Churchill School, mimeographed.
- Krippner, S., 1973. A study of neurological organization procedures and megavitamin treatment for children with brain dysfunction. Journal of Orthomolecular Psychiatry, 1:121-132.
- Krippner, S., 1973-74. An evaluation of N.O. procedures on children with brain dysfunction. Academic Therapy, 9:221-226.
- Krippner, S., Silverman, R., Cavallo, M., & Healy, M., 1974. Stimulant drugs and hyperkinesis: A question of diagnosis. Reading World, 13:198-222.
- Thomas, E. W. Brain Injured Children. Springfield, IL: Charles C Thomas, 1969.