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DESCRIPTORS *Abstracts; *Bibliographies; *Exceptional Child Research; *Learning Disabilities

ABSTRACT

The selected bibliography of research on learning disabilities contains approximately 80 abstracts with indexing information explained to be drawn from the computer file of abstracts representing the Council for Exceptional Children Information Center's complete holdings as of July, 1972. Abstracts are said to be chosen using the criteria of availability of document to user, currency, information value, author's reputation, and classical content. Preliminary information explains how to read the abstract (a sample abstract is included which identifies the different parts of the abstract), how to use author and subject indexes, how to purchase documents through the Educational Resources Information Center Document Reproduction Service (two order blanks are provided), an order blank for Exceptional Child Education Abstracts in which the abstracts are originally published, a list of indexing terms searched to compile the bibliography, and a list of journals from which articles are abstracted for the bibliography. Publication date of documents abstracted ranges from 1943 to 1971. (CB)

ED 065962



LEARNING DISABILITIES—RESEARCH

A Selective Bibliography

July 1972



CEC Information Center on Exceptional Children
An ERIC Clearinghouse
The Council for Exceptional Children
Jefferson Plaza, Suite 900
1411 S. Jefferson Davis Highway
Arlington, Virginia 22202

Exceptional Child Bibliography Series No. 616

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EC 042 830 E

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With a grant from the US Office of Education, the CEC Information Center was established at The Council for Exceptional Children to serve as a comprehensive source of information on research, instructional materials, programs, administration, teacher education, methods, curriculum, etc. for the field of special education. The Center functions as the Clearinghouse on Exceptional Children in the Educational Resources Information Centers (ERIC) program and also as a member center in the Special Education IMC/RMC Network. In addition, the CEC Center's program includes a commitment to a concentrated effort towards the development of products which will interpret research results into educational methods and practices.

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The *Exceptional Child Bibliography Series* was initiated by the CEC Information Center to answer the need for rapid responses to specific requests for information. The volume of information requests received by the Center is analyzed and used as a guide in preparing special topic bibliographies in the field of exceptional child education. Abstracts contained in the bibliographies are drawn from the computer file of abstracts which represents the CEC Information Center's complete holdings as of the date indicated on each bibliography.

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Each abstract contains three sections—bibliographic data, descriptors, and a summary of the document. The bibliographic section provides the document's identifying number (ED and/or EC), publication date, author, title, source, and availability. The descriptors indicate the subjects with which a document deals. The summary provides a comprehensive overview of the document's contents and in some cases document availability is announced here.

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Sample Abstract Entry

Clearinghouse accession number → EC 01 0769

Publication date → Publ. Date Jun 68

Author(s) → Hensley, Gene, Ed.; Buck, Dorothy P., Ed.

Title → Cooperative Agreements between Special Education and Rehabilitation Services in the West: Selected Papers from a Conference on Cooperative Agreements (Las Vegas, Nevada, February, 1968).

EDRS mf, hc indicates document is available in microfiche and hard copy.* → EDRS mf, hc

Abstract number used in Indexes → ABSTRACT 769

ERIC accession number. Use this number when ordering microfiche and hard copy → ED 025 864

Number of pages. Use this figure to compute cost of hard copy. → 44p

Institution(s) → Western Interstate Commission For Higher Education, Boulder, Colorado; United Cerebral Palsy Research And Education Foundation, Inc., New York; Rehabilitation Services Administration (DHEW), Washington, D. C.

Contract or grant number → VRA-546T66

Descriptors—subject terms which characterize content → Descriptors: exceptional child education; cooperative programs; vocational rehabilitation; vocational education; administration; mentally handicapped; state agencies; cooperative education; educational coordination; cooperative programs; state federal aid; administrative problems; communication problems; equalization aid; work study programs; handicapped; cost effectiveness

Summary → Five papers discuss cooperative work study agreements between schools and vocational rehabilitation services in the western states. Areas discussed include the advantages of cooperative agreements, the forms and disadvantages of third party agreements, basic concepts of the programs, and an outline form to use when applying for matching funds, the relationship of special education, rehabilitation and cooperative plans, programs and agreements, and California's past and present work study programs for the mentally retarded. Also reviewed are research demonstrating the economic feasibility of vocational training for the educable, mentally retarded in the public schools and communication problems in work study programs. The conference summary considers the purposes, goals, essence of, and necessity for cooperative agreements. (MK)

Abstractor's initials → (MK)

*NOTE: EDRS mf indicates microfiche reproduction only.

Terms Search

Index terms used to retrieve information on *Learning Disabilities—Research* from the Center's computer file of abstracts are listed alphabetically below:

<i>Dyslexia</i>	<i>Neurological Defects</i>
<i>Exceptional Child Education</i>	<i>Neurologically Handicapped</i>
<i>Exceptional Child Research</i>	<i>Perceptual Motor Coordination</i>
<i>Hyperactivity</i>	<i>Perceptual Motor Learning</i>
<i>Learning Difficulties</i>	<i>Perceptually Handicapped</i>
<i>Learning Disabilities</i>	<i>Psychomotor Skills</i>
<i>Minimally Brain Injured</i>	<i>Reading Difficulty</i>
<i>Motor Development</i>	

Journals

Abstracts of journal articles from the following periodicals appear in this bibliography:

American Journals of Orthopsychiatry
Behavior Therapy
Exceptional Children
Journal of Child Psychology and Psychiatry
Journal of Consulting and Clinical Psychology
Journal of Education
Journal of Learning Disabilities
Journal of Music Therapy
Journal of Nervous and Mental Disease
Journal of Pediatrics
Journal of Personality Assessment
Journal of Reading
Journal of School Psychology
Journal of Social Issues
Journal of Speech and Hearing Disorders
Physical Therapy
Psychology in the Schools
Reading Research Quarterly
Reading Teacher
Research Quarterly
Schizophrenia

ABSTRACTS

ABSTRACT 10132

EC 01 0132 ED 013 118
 Publ. Date Mar 67 59p.
 Beery, Keith E.
Preschool Prediction and Prevention of Learning Disabilities.
 San Rafael City Schools, California;
 Marin Co. Supt. Sch. Off., San Rafael,
 California
 OEG-4-7-008742-2031, OEG-4-7-068743 -
 1507
 EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; tests; identification; preschool children; children; prediction; predictive measurement; prevention; auditory tests; task performance; prognostic tests; psychological tests; screening tests; longitudinal studies; language tests; psycholinguistics; Developmental Test of Visual Motor Integration; Illinois Test of Psycholinguistic Abilities; ITPA

The initial screening phase of a 4-year longitudinal study designed to predict and prevent learning disabilities in a general school population is reported. Children (aged 3 1/2 to 5 1/2) of an entire school district were invited to the schools to be screened for evidence of potential learning disability. These children were to be rescreened annually and tested for academic achievement at the conclusion of kindergarten and of first and second grade. Screening involved audiometric, visual, and psychological testing. Teachers administered the following tests to all children--Illinois Test of Psycholinguistic Abilities (ITPA), Developmental Test of Visual-Motor Integration (VMI), Kephart Perceptual Motor Rating Scale, Peabody Picture Vocabulary Test, and Teacher's Behavioral Rating Scale. The 365 children in the experimental and control groups were assigned by matching sex, chronological age, mean ITPA language age, prekindergarten experience, and profile similarity. Results from the experimental children were forwarded to their future schools and physicians with suggestions for preventative guidance. It was found that boys did as well as girls in both the younger and older groups, which appears to be contrary to the more usual finding that girls are more ready than boys as they approach kindergarten age. Enrollment bias seems to be evidenced in the comparison between the results of older and younger children, as the younger children, performed at a higher level, relative to their chronological ages, than did the older children. The test patterns revealed nearly twice as many visual-motor deficits as there were auditory-vocal deficits and almost twice as many association, encoding, and sequencing deficits as there were decoding (reception of information) deficits in both experimental and control groups. Figures and tables present statistical information.

Thirty-six references are listed. (TM)

ABSTRACT 10179

EC 01 0179 ED 018 019
 Publ. Date 66 47p.
 Perry, Harold W.
A Perceptual Training Program for Children with Learning Disorders.
 Memphis City Sch. System, Tennessee
 EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; teaching methods; program evaluation; tests; special classes; perception; perceptually handicapped; minimally brain injured

An experimental training program studied the effectiveness of new methods of identifying and teaching perceptually handicapped children with learning disorders. Subjects were selected by the following criteria--specific learning deficits, perceptual deficits, general coordination deficits, hyperkinesis, impulsivity, emotional lability, short attention span and/or distractibility, and equivocal neurological signs. Subjects selected were placed either in class type T (tractible or tranquil) or in type H (hyperkinetic). Experimental controls exercised included evaluation of all children before enrollment in special classes, unbiased selection, and assignment of some of the suitable children to regular classes. A 3-year evaluation was made. Curriculum focused on basic school skills, and teachers took account of the characteristic variability of perceptually handicapped children. Classrooms were adapted to eliminate distraction, and classes were kept small. Motor activity and repetition were structured into classroom activities. Special training was required of the teachers. The first year the 14 experimental subjects improved over the 10 controls with an average grade level difference of .13 in reading, 1.01 in spelling, and .92 in arithmetic. The second year the 31 subjects improved an average of 1.3 in reading, .9 in spelling, and .9 in arithmetic. Behavioral changes were also noted. The Bender-Gestalt tests were administered to measure perceptual growth. During the third year, with 94 subjects in 11 classes, average improvement was .8 in reading, .6 in spelling, and .6 in arithmetic. Tables of achievement scores are given. The sources of the teaching methods used are identified as Alfred Strauss and Laura Lehtinen, and the Frostig Program for Development of Visual Perception and the Hay-Wingo method of teaching reading and language skill are recommended. Drawings evidencing visual and visual motor perceptual growth of several children involved in the program are included as exhibits. A bibliography lists four items. (JD)

ABSTRACT 10296

EC 01 0296 ED 017 102

Publ. Date 65

Schulman, Jerome L. and Others
Brain Damage and Behavior, a Clinical Experimental Study.
 EDRS not available

Descriptors: exceptional child research; learning disabilities; behavior; clinical diagnosis; diagnostic tests; educational diagnosis; minimally brain injured; behavioral science research; behavior patterns; identification; identification tests; psychological patterns; testing; psychological testing; psychological tests; test construction; Stanford Binet Intelligence Scale; Wechsler Intelligence Scale for Children; Bender Gestalt Test; Draw a Person Test

Results are related of a study which was undertaken to attempt to answer three questions--to what extent do eight techniques commonly used to diagnose brain damage co-vary, to what extent do the various behavioral symptoms that occur with brain damage co-vary, and to what extent do the diagnostic measures, singly or in groups, predict the presence of the behavioral symptoms. The study consisted of a correlational analysis of the results of a battery of tests which were administered to 35 retarded boys aged 11 to 15 and with Stanford Binet IQ scores from 50 to 80. The battery included traditional diagnostic tests of brain damage--the Bender-Gestalt Test, the Draw-a-Person Test, the Wechsler Intelligence Scale for Children, the Stanford-Binet Intelligence Scale, a standard neurological examination, and an electroencephalogram. Also administered were tests developed to measure objectively the alleged brain damage behavioral syndrome--hyperactivity, distractibility, inconsistency, and emotional lability. Statistical analysis of data yielded these results--(1) the individual diagnostic measures were not found to be sufficiently reliable to be acceptable, (2) the diagnostic measures which were used to measure brain damage were found not to co-vary significantly but instead tended to separate into at least two loose types of measures, (3) in instances where data on reliability were available, the behavioral measures (with one exception) attained or approached acceptable reliability, (4) the variables in the behavioral syndrome clustered into meaningful groups, but the groups did not co-vary, (5) only one set of behaviors correlated significantly with both diagnostic clusters, but that correlation was in the wrong direction. Appendixes include development of activity measure, development of distractibility tests, scoring of the Bender-Gestalt and Draw-a-Person tests, and data presented tabularly. The bibliography lists 173 items. This document was published by Charles C Thomas, 301-327 East Lawrence Avenue, Springfield, Illinois 62703, and is available for \$7.00. (MU)

ABSTRACT 10515

EC 01 0515 ED 023 212
 Publ. Date 29 Mar 68 127p.

Rawson, Margaret B.

Developmental Language Disability: Adult Accomplishments of Dyslexic Boys. Hood College Monograph Series, Number 2.

EDRS not available

The Johns Hopkins Press. Baltimore. Maryland 21218 (\$5.50).

Descriptors: exceptional child research; learning disabilities; achievement; identification; family (sociological unit); gifted; heredity; dyslexia; underachievers; learning readiness; learning experience; intelligence; reading achievement; achievement rating; vocational followup; professional occupations; followup studies; spelling; perceptual motor coordination

A longitudinal study was made of 56 boys, a highly homogeneous group from 44 families. All had attended a regular private elementary school for at least 3 years between 1930 and 1937. All were placed in three groups according to their performance on a language learning facility scale. The lowest 20 were rated as dyslexic, with specific developmental language disability. The followup study was done in 1964 and 1965. The subjects ranged from 26 to 40 years of age, with a mean of 33.4. All had completed secondary school; 48 had earned their baccalaureate degrees; and three were still undergraduates. Mean numbers of college years completed were 5.451 (high group), 5.69 (medium group), and 6.02 (low group). All were employed and classified by Warner's Scale in Social Class in America, and the low group had the highest rating with nine in the first class, nine in the second, and one each in the fourth and fifth classes of the five classes. Twenty boys in the low group (IQ range 94 to 153) were matched with one from the other two groups (IQ range 111 to 185) by achievement in education, age, type of college, socioeconomic status, and occupation. The difference between the mean IQ's favored 14 nondyslexic and five dyslexic boys (p less than .001). (SN)

ABSTRACT 10573

EC 01 0573 ED 021 357
 Publ. Date Aug 67 67p.

Best, Helen and Others

The Effect of Structured Physical Activity on the Motor Skill Development of Children with Learning Disabilities (Minimal Brain Dysfunction).

Memphis State University, Tennessee
 EDRS mf, hc

Descriptors: exceptional child research; learning disabilities; physical education; minimally brain injured; physical activities; motor development; skill development; tests; psychomotor skills; perceptual motor coordination; perceptual motor learning; children; special programs; Johnson Test of Motor Skill Development

Students in 24 perceptual development

classes for the minimally brain injured were studied to determine the effect of structured physical activity on motor skill development, to compare this effect with the effect of unstructured activity, and to determine the effect of an increased amount of time of physical activity. The Johnson Test of Motor Skill Development was administered before and after an 8-week program. The experimental group of classes was given structured physical activities; the control group had regular play periods. Results indicated a statistically significant difference between the experimental and control groups (p less than .01) with increased motor skill development occurring in the experimental group. Schedules and diaries recording structured activities used in the experimental group are included. The Johnson Test, four tables, four illustrations, and a 19-item bibliography are provided. (LE)

ABSTRACT 10761

EC 01 0761 ED 024 163
 Publ. Date Apr 67 113p.

Sapir, Selma G.

A Pilot Approach to the Education of First Grade Public School Children with Problems in Bodily Schema, Perceptual-Motor and/or Language Development. Final Report.

Columbia University, New York, New York, Teachers College;
 Union Free School District Number 1, Scarsdale, New York
 Office of Education (DHEW), Washington, D. C., Bureau of Research
 EDRS mf, hc
 OEG-32-42-0280-6005
 BR-6-8275

Descriptors: exceptional child research; learning disabilities; perception; language; teaching methods; grade 1; visual perception; language development; academic achievement; auditory perception; discrimination learning; perceptual motor learning; expressive language; experimental programs; perceptual development; screening tests; sensory integration; experimental teaching

Fifty-four kindergarten children were screened with the Sapir Developmental Scale to highlight deficiencies in bodily schema, perceptual motor skills, and language development, and were matched in groups of three by score, chronological age, and sex with one of the three acting as control. Three first grade classes were organized as follows: one experimental with 12 deficit children using a deficit centered training curriculum; one experimental with 24 normal children using a traditional curriculum; one control with six deficit children and 12 normal children using a traditional curriculum. The children were given a battery of psychodiagnostic tests in the fall and spring of the first grade. The results clearly favored the deficit children in the experimental class with significant differences in mean change in Wechsler Intelligence Scale for Children scores (p equals .05), visual perception and language function-

ing (p equals .01), and in perceptual motor skills (p less than .05). Important changes were also noted for the same groups in auditory-visual integration and visual perception, and in language development, particularly in expressive areas. Little difference was seen in the measurement of academic achievement. Performance favored the normal experimental group but without significant differences. (Author/SN)

ABSTRACT 10775

EC 01 0775 ED 025 894
 Publ. Date Sep 67 101p.

McGrady, Harold J.; Olson, Don A.

Visual and Auditory Learning Processes in Normal Children and Children with Specific Learning Disabilities. Final Report.

Northwestern University, Evanston, Illinois

Office of Education (DHEW), Washington, D. C., Bureau of Research
 EDRS mf, hc
 OEG-3-6-062549-1752
 BR-6-2549

Descriptors: exceptional child research; learning disabilities; perception; testing; psychoeducational processes; visual perception; sensory integration; visual discrimination; verbal tests; auditory perception; auditory discrimination; predictive ability (testing); response mode; age differences; average students

To describe and compare the psychosensory functioning of normal children and children with specific learning disabilities, 62 learning disabled and 68 normal children were studied. Each child was given a battery of 13 subtests on an automated psychosensory system representing various combinations of auditory and visual intra- and intersensory conditions for verbal, nonverbal-nonsocial, and nonverbal-social stimuli. Comparisons were made between the normal children and the two types of learning disability groups (a school learning disability group and a clinic learning disability group). Two age groups of children were considered: 8-year-olds and 9-year-olds. The clinic learning disabilities appeared to have more acute disorders as a group than the school-derived population of learning disabilities. They made significantly more errors on verbal psychosensory functions, regardless of the sensory conditions. In addition, the 9-year-old group displayed significant problems of an auditory intrasensory nature. There was a generalized failure of the clinic learning disabilities to perform the tasks with speed equivalent to their comparison groups. The use of response time criteria seemed encouraging as an area for future investigation but test batteries need revision as items may have been too easy. (Author/RP)

ABSTRACT 11547

EC 01 1547 ED 029 448
 Publ. Date 31 Dec 68 93p.

Zedler, Empress Y.

Educational Programming for Pupils

with Neurologically Based Language Disorders, Final Report.

Southwest Texas State College. San Marcos, School of Education
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf, hc
OEC-5-10-001
BR-5-1062

Descriptors: exceptional child research; learning disabilities; drug therapy; regular class placement; academic achievement; special classes; individualized instruction; after school tutoring; language handicapped; minimally brain injured; language instruction; basic skills; intelligence differences; learning characteristics; student evaluation; comparative analysis; underachievers

To investigate procedures whereby schools may achieve maximal results with otherwise normal underachieving pupils with neurologically based language-learning disorders, 100 such subjects were studied over a 2-year period. Fifty experimental subjects remained in regular classes in school and received individualized teaching outside of school hours from specially trained clinicians. Fifty matched control subjects were enrolled in special education classes and did not receive clinical teaching after school. Half of the experimental and half of the control subjects had anticonvulsive medication prescribed by their physicians; the others did not. Tests of academic achievement and mental functioning indicated that the experimental groups made significantly greater gains in both variables than did the control. However, the medicated groups did not make greater gains than the unmedicated. (Author)

ABSTRACT 11799

EC 01 1799 ED N.A.
Publ. Date Sep 69 6p.
Golden, Nancy E.; Steiner, Sharon R.
Auditory and Visual Functions in Good and Poor Readers.
EDRS not available
Journal of Learning Disabilities; V2 N9
P476-81 Sept 1969

Descriptors: exceptional child research; reading difficulty; auditory perception; visual perception; dyslexia; identification; testing

This study investigates the relationship between specific auditory and visual functions and reading performance. Pairs of second graders matched as good and poor readers on the basis of MA, IQ, and CQ were tested with several subtests from the revised ITPA and the Monroe Visualization Test. The findings seem to suggest that poor readers were lacking primarily in auditory functions rather than visual. (Author)

ABSTRACT 11979

EC 01 1979 ED 031 012
Publ. Date 10 Oct 68 19p.
Gold, Lawrence
Approach to Diagnosis and Treatment

of Pupils with Developmental Dyslexia.

Learning Center, Binghamton, New York;
Broome County School District, New York;
Tioga County School District, New York
Office of Education (DHEW), Washington, D. C.
EDRS mf, hc
Paper Presented at Annual Conference of School Psychologists of Upper New York State (Binghamton, New York, October 10, 1968).

Descriptors: exceptional child education; learning disabilities; identification; dyslexia; teaching methods; program planning; clinical diagnosis; tutoring; student characteristics; interdisciplinary approach; individual instruction; language skills; reading centers; reading difficulty; supplementary educational centers; remedial reading programs; tutorial programs; program evaluation

A history of the growing interest and knowledge concerning dyslexia is provided to clarify theoretical models, while the operational model is described in terms of admission criteria, instruction, diagnostic and evaluative techniques, role of interdisciplinary staff, and pupil characteristics. Methods, materials, and approach of the instructional program, and instruments used for program evaluation are presented. (RD)

ABSTRACT 20133

EC 02 0133 ED N.A.
Publ. Date 67 27p.
McLeod, John
Some Psycholinguistic Correlates of Reading Disability in Young Children.
EDRS not available
Reading Research Quarterly; V2 N3 P5-31 Spr 1967

Descriptors: exceptional child research; learning disabilities; reading; dyslexia; psycholinguistics; auditory discrimination; visual discrimination; verbal ability; speech skills

Three experiments compared the ability of 23 second grade children who were disabled readers with the ability of a control group to reproduce tachistoscopically presented letter sequences and to discriminate and reproduce vocally auditorily presented words. Both the letter sequences and the context of the words were of varying approximations to English. The reading disability group was significantly and consistently inferior in reproducing the visually presented letter sequences of the zero-, first-, and second-order approximations to printed English; their deficiency was independent of the order of approximation. They were also significantly inferior in vocally reproducing auditorily presented words which had been preceded by contexts of first- and third-order approximations to spoken English, although less inferior when the stimulus words were preceded by the more redundant English context. In addition, the reading disability group

was significantly inferior in discriminating between two monosyllabic words which differed in only a single phoneme, but did not differ in the ability to vocally reproduce isolated monosyllabic words. (LE)

ABSTRACT 20662

EC 02 0662 ED N.A.
Publ. Date Oct 66 144p.
DeHirsch, Katrina and Others
Predicting Reading Failure.
Columbia-Presbyterian Medical Center, New York, New York, Pediatric Language Disorder Clinic
Health Research Council, New York, New York
EDRS not available
Harper and Row, Publishers, Inc., 49 East 33rd Street, New York, New York 10016 (\$5.95).

Descriptors: exceptional child research; learning disabilities; identification; reading; tests; predictive measurement; preschool children; preschool evaluation; reading readiness; reading achievement; perceptual motor coordination; spelling; writing; minimally brain injured; reading failure; followup studies; prediction; premature infants; maturation; dyslexia

Presented are the results of a study to predict reading, writing, and spelling disabilities among preschool children. Thirty boys and 23 girls from lower middle class backgrounds with a medium age of 5 years 10 months and IQ's between 84 and 116 were administered 37 tests. The tests, presumed to reflect perceptual motor and linguistic competencies essential to later academic achievement, were correlated with end-of-first grade and end-of-second grade academic performance in reading, writing and spelling. The measures most predictive of later academic performance were identified and a battery of selected instruments to identify preschool children who present high risk of becoming future academic failures was recommended for psychologists and teachers. Supplementary analyses of failing readers and prematurely born children used the entire test battery. Clinical observations and study results were used to formulate recommendations for educational diagnosis and teaching. (AB)

ABSTRACT 20694

EC 02 0694 ED N.A.
Publ. Date Oct 69 6p.
Jones, Joyce
Dyslexia: Identification and Remediation in a Public School Setting.
EDRS not available
Journal of Learning Disabilities; V2 N10
P533-8 Oct 1969

Descriptors: exceptional child research; dyslexia; remedial programs; individualized instruction; reading improvement; nonprofessional personnel; testing; reading achievement; learning disabilities

A Title III grant made possible a 3-year experimental program to determine if children with the specific reading disabili-

ty, dyslexia, could be remediated by the use of a structural-linguistic procedure taught through a multisensory approach. This remedial procedure was taught on a one-to-one basis of instruction through the use of para-educational personnel under close supervision in a regular public school setting. During the years of the program 78 students attended the full day Perceptual Development Center Program and 545 students participated in an hour-a-day reading program. Test-retest data revealed that students receiving this specialized training improved in reading skills and retained this gain or further improved after dismissal from the program. (Author)

ABSTRACT 20822

EC 02 0822 ED 032 688
Publ. Date Aug 69 131p.
Individual Learning Disabilities Program; Pilot Incidence Study, Volumes I, II, and III. Technical Report.
Rocky Mountain Educational Laboratory, Greeley, Colorado
Office of Education (DHEW), Washington, D. C., National Center for Educational Research and Development
EDRS mf.hc
OEC-4-7-062828-30-63
BR-6-2828

Descriptors: exceptional child research; learning disabilities; rating scales; incidence; screening tests; test reliability; identification; psychological testing; educational testing; medical evaluation; clinical diagnosis; behavior patterns; individual characteristics; behavior rating scales; rating scales; evaluation methods; Classroom Screening Instrument

Three levels of screening procedures were used to identify the incidence and nature of learning disabilities. The first level involved the application by classroom teachers of the Classroom Screening Instrument (CSI), especially developed for the study, and of other measures; the second level involved psychoeducational differential diagnosis by qualified testers; and the third, medical examinations by appropriate personnel. Screening of 2,400 second grade children at level 1 resulted in identification of 361 for level 2 screening, of whom 134 were selected for level 3 screening. Results indicated that classroom teachers could use the CSI with accuracy to identify children with varied learning problems. The study further indicated approximate incidences of 4.7% for severe learning disabilities and 6% for less severe learning disabilities. A technical report is given in volume 1; descriptive data and statistical analysis are provided in volumes 2 and 3, respectively. (JD)

ABSTRACT 21100

EC 02 1100 ED 029 773
Publ. Date Apr 69 17p.
Klein, Isobel; Marsh, Helen R.
Identification and Remediation of Perceptual Handicaps in Learning to Read. Final Report.
Glen Cove School District, New York
Office of Education (DHEW), Washing-

ton, D. C., Bureau of Research
EDRS mf.hc
OEC-1-7-078015-2986
BR-7-8015

Descriptors: exceptional child research; perception tests; perceptual development; reading achievement; reading diagnosis; reading improvement; reading research; retarded readers; visual perception; word recognition; remedial reading

Results of an investigation of the effects of perceptual training upon selected measures of reading achievement are reported. Subjects were 87 second-grade children of average intelligence who had evidenced reading difficulties as well as perceptual deficits. They were chosen from the Glen Cove, New York, school district on the basis of their performance on the following tests: the Lorge-Thordike Intelligence Scale; the Wechsler Intelligence Scale for Children (WISC); the Stanford Reading Test, Word Recognition section; and the Frostig Developmental Test of Visual Perception. Subjects were divided into three matched groups: a group that received 25 minutes of perceptual training twice a week, a group that received traditional remediation for the same length of time, and a control group. An analysis of variance of the reading achievement scores showed no significant differences before treatment. A t-test revealed that the remedial reading group post-test scores were significantly higher (.05 level) than those of either the control group or the perceptual training group. An analysis of variance of the Frostig data showed no significant differences between the means of the three groups. No distinctive WISC sub-test patterns for retarded readers were noted. References are included. (WB)

ABSTRACT 21235

EC 02 1235 ED 002 981
Publ. Date 59 839p.
Cruikshank, William M. and Others
Teaching Methodology for Brain-Injured and Hyperactive Children, A Demonstration-Pilot Study, Special Education Rehabilitation Monograph Series Number 6.
Syracuse University, New York
Office of Education (DHEW), Washington, D. C.
EDRS mf.hc
OEC-SAE-6415
CRP-090

Descriptors: exceptional child research; mentally handicapped; learning disabilities; emotionally disturbed; teaching methods; diagnostic tests; demonstration projects; pilot projects; psychological characteristics; instructional materials; classroom environment; case studies (education); multiply handicapped; minimally brain injured; behavior; academic achievement

An investigation was made of the effectiveness and value of a controlled classroom environment, especially prepared materials, and highly structured teaching methods upon learning problems and school adjustment of mentally retarded,

emotionally disturbed children, with or without clinically diagnosed brain injury. Children studied were those whose emotional difficulties were characterized by mental retardation and hyperactive aggressive behavior, and those with mental retardation and known or suspected brain injury between the ages of 7 and 11 years. A thorough case study of each child was made. A control group of endogenous children and hyperactive children without neurological indications of brain injury, taught by conventional methods, was used. The two experimental groups were in an educational situation designed in general along the lines described by Strauss and Lethinen. One experimental group included children with conclusive evidence of brain injury and mental retardation, and children with mental retardation and hyperactive aggressive behavior without evidence of brain damage. The second group included children whose case histories and behavior were typical of the brain injured but without neurological indications of brain damage. Although achievement in learning was demonstrated in both groups, the study showed statistically significant differences in gain for the experimental group. (GC)

ABSTRACT 21241

EC 02 1241 ED 002 811
Publ. Date 64 110p.
Novack, Harry S.
The Adaptation for Group Classroom Use of Clinical Techniques for Teaching Brain-Injured Children.
Rhode Island State Department of Education, Providence;
Clark County School District, Athens, Georgia
Office of Education (DHEW), Washington, D. C.
EDRS mf.hc
CRP-186

Descriptors: exceptional child research; administration; program planning; teaching methods; learning disabilities; mentally handicapped; group instruction; classroom techniques; low achievers; clinics; tutoring; remedial programs; minimally brain injured; admission criteria; professional services

In the development of a public school program for brain injured children of average or low average intellectual potential, clinical tutorial techniques were collected, classified, and adapted to group teaching. A model classroom was set up for experimenting with, testing, and demonstrating the adapted techniques, and for developing hypotheses for experimentation in group education of brain injured children. It was found that children for the class had to be selected to keep the range of learning problems as narrow as possible. Class size had to be kept under 10. Besides motivated and skilled teachers and a full-time teacher's assistant in the classroom, professional assistance available outside the classroom was needed--at least that of therapist, psychologist, and social work-

er. It was concluded that selection criteria for grouping brain injured children should be based more on educational behavior than on medical diagnosis. (JL)

ABSTRACT 21452

EC 02 1452 ED 034 331
Publ. Date Mar 69 85p.
Operation Bridge; A Title III Project for Neurologically Impaired Children, Prince George's County, Maryland, Special Education Department.
Prince George's County Schools, Maryland, Special Education Department
Office of Education (DHEW), Washington, D. C.
EDRS mf, hc
OEG-67-2970

Descriptors: exceptional child research; learning disabilities; summer schools; program evaluation; summer programs; experimental programs; student adjustment; social adjustment; emotional adjustment; program costs; parent attitudes; teacher education; summer institutes; parent counseling; family counseling; staff role

A 6-week experimental demonstration program was provided for 90 neurologically impaired children with severe learning problems to bridge the gap between school terms and to provide learning experiences for teachers, teacher-trainees, and parents. The staff at each of three host schools consisted of five master teachers, five college students, plus a full time psychologist and a pupil personnel worker to conduct parent and sibling discussion groups and to aid the staff. The children had enrichment activities in reading, language development, motor development, manipulation, and arts and crafts. On pre- and post-project evaluations of social, emotional, and academic level of functioning, over 60% of the children readjusted to academic, school routine, and social-emotional levels within 2 weeks (instead of the usual 6 to 8 weeks) after school started in the fall. Teachers and supportive staff felt that they gained experience in working with children, parents, siblings, trainees, and each other. Recommendations are proposed for 1969 program improvements, and the appendix gives anecdotal record forms, evaluative questionnaires, and budget estimates. (LE)

ABSTRACT 21470

EC 02 1470 ED 034 348
Publ. Date Aug 69 32p.
Carter, John L.
Effects of Visual and Auditory Background on Reading Achievement Test Performance of Brain-Injured and Non Brain-Injured Children.
Houston University, Texas
Office of Education (DHEW), Washington, D. C., Bureau of Research
EDRS mf, hc
OEG-0-8-087053-4402(032)
BR-8-7053

Descriptors: exceptional child research; minimally brain injured; attention; task performance; aural stimuli; visual stimuli;

reading comprehension; learning disabilities; visual perception; reading tests

Forty-two brain injured boys and 42 non brain injured boys (aged 11-6 to 12-6) were tested to determine the effects of increasing amounts of visual and auditory distraction on reading performance. The Stanford Achievement Reading Comprehension Test was administered with three degrees of distraction. The visual distraction consisted of either very few items per page, a normal amount of items, or pages with a superimposed jigsaw puzzle design; the auditory distraction was supplied by a tape recording of school sounds. Distractions did not affect the reading performance of either group, did not affect the brain injured any more than the normal, and there was no trend for comprehension to decrease concomitantly under combined increases of visual and auditory distractions. The high dual distraction negatively affected the non brain injured group more than the brain injured group. The conclusion was that the basic assumptions of teaching materials and methodology for brain injured children should be reevaluated. (Author/JM)

ABSTRACT 21811

EC 02 1811 ED N.A.
Publ. Date Apr 70 8p.
Michal-Smith, Harold and Others
Dyslexia in Four Siblings.
EDRS not available
Journal of Learning Disabilities; V3 N4
1985-92 Apr 1970

Descriptors: exceptional child research; dyslexia; heredity; siblings; genetics; family influence; individual characteristics; family background; learning disabilities

Examining learning problems in four siblings of middle class background, the article discusses the specific deficits in each child and points up the similarities and differences in their associated characteristics and their individual emotional development. Based on the history, presenting symptoms and outcome, the authors believe that a genetic factor may be causative. (Author)

ABSTRACT 21988

EC 02 1988 ED 036 001
Publ. Date Jun 69 346p.
Minimal Brain Damage in Children. Final Report.
Northwestern University, Evanston, Illinois
Public Health Service (DHEW), Washington, D. C., Health Services and Mental Health Administration
EDRS mf, hc

Descriptors: exceptional child research; learning disabilities; minimally brain injured; educational diagnosis; evaluation criteria; psychoeducational processes; ophthalmology; electroencephalography; neurologically handicapped; student evaluation; testing; screening tests; medical evaluation; test results; statistical data; academic achievement

Seven psychoeducational tests were administered to 2,767 third and fourth graders to screen for underachievers who were then intensively studied through psychoeducational techniques and given ophthalmological, neurological, and electroencephalographic examinations. The results were that 15% were defined as underachievers (fail was below learning quotient of 90) and half of these had a learning disability. The learning disability group were inferior to all groups in verbal tests and language skills; their processes of organizing experience appeared different; and their social maturity was below average. These children showed no greater incidence of visual defects indicating a need to emphasize behavioral and medical aspects in remediation. Some children with deficits in learning showed dysfunctions of the brain again indicating the need for medical diagnosis and attention. There were indications that the underachievers showed more signs of neurological disturbance which suggested a relationship between these disturbances and learning deficiencies. Teacher ratings on the basis of the pupil rating scale used were found to be of critical usefulness. Extensive tables of results are included. (Author/JM)

ABSTRACT 22069

EC 02 2069 ED 034 669
Publ. Date Apr 69 14p.
Kasdon, Lawrence M.
Causes of Reading Difficulties--Facts and Fiction.
EDRS mf, hc

Paper Presented at the International Reading Association Conference (Kansas City, Missouri, April 30-May 3, 1969).

Descriptors: exceptional child research; dyslexia; interdisciplinary approach; learning difficulties; parent attitudes; reading difficulty; reading failure; reading processes

The disagreement on terminology used to describe reading difficulties and to classify reading underachievers is illustrated. Some of the research findings on physical, intellectual, emotional, and educational factors which cause reading difficulty are described, with emphasis on replying to questions asked by parents and on clarifying some misconceptions held by lay persons and educators. It is emphasized that the causes of reading failure rarely occur in isolation, and therefore the study of the interaction effect of several factors becomes essential. The typical ex post facto studies of learners from 9 to 20 years of age work from effect to find causes. It is suggested that longitudinal studies, particularly when conducted by an interdisciplinary team, would be much more useful in providing accurate information about causes of reading failure. A bibliography is included. (CM)

ABSTRACT 22189

EC 02 2189 ED 037 841
Publ. Date 68 25p.
Patterson, Natalie E., Comp.

Multi-Sensory Approach to Reading Disabilities.

Fayette County Public Schools, Lexington, Kentucky, Division of Instructional Services
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; identification; intervention; remedial reading programs; reading difficulties; language arts; resource teachers; remedial reading; motor development; referral; teaching methods; instructional materials; minimally brain injured; dyslexia; emotional problems

Educational diagnostic methods were used to screen children evidencing minimal brain damage, dyslexia, or emotional problems. Of 750 children, 15% had such difficulties; they received a highly structured language arts program in homogeneous transition groups while remaining in their usual homeroom. In addition, they participated in motor training and a rhythm and patterning program. Academic gains resulted in various areas; reading ages increased an average of 1.7. Appendixes, comprising about two-thirds of the document, provide the referral form and an explanation of it along with descriptions of methods and materials used in the three programs. (JD)

ABSTRACT 22193

EC 02 2193 ED 037 845
Publ. Date 68 248p.

Focus on Children with Underdeveloped Skills: End of Budget Year Report.

Montgomery County Board of Education, Rockville, Maryland
Office of Education (DHEW), Washington, D. C., Bureau of Elementary and Secondary Education
EDRS mf,hc
OEG-0-8-051460-2834
BR-68-05146-0

Descriptors: exceptional child research; learning difficulties; identification; intervention; learning disabilities; resource teachers; professional training; program coordination; preschool children; student evaluation; health; screening tests; language development; academic achievement; family background; perceptual motor learning; learning readiness; adjustment (to environment)

Serving prekindergarten through grade 5, the project was designed to improve the educational performance of children with learning problems (without regard to categorical labels) and thus support the work of the classroom teacher in the child's normal school setting. Team screening processes were developed to identify preschool or school age children with learning problems; assessment, intervention, and followup procedures were also developed, involving teaching teams and resource staff. In addition, continuing staff development and training procedures were provided for project personnel; the project was coordinated and integrated with the school system and the community; a record system was

designed as a model for information collection, storage, and retrieval; and project evaluation procedures were developed and applied in terms of outcomes for individual children and for the school system. Appendixes, comprising over half of the document, provide forms and other project material. (Author/JD)

ABSTRACT 22217

EC 02 2217 ED 037 869
Publ. Date 69 27p.

**Sapir, Selma
Learning Disability and Deficit Centered Classroom Training.**

Columbia University, New York, New York, Teachers College
EDRS mf,hc
RR-VI-N2

Descriptors: exceptional child research; learning disabilities; sensory training; academic achievement; student evaluation; intelligence; perceptual development; perceptual motor coordination; psycholinguistics; language ability; sex differences; minimally brain injured; teaching methods

Eighteen first grade children (10 boys and eight girls, IQ's 91 to 128) who evidenced a developmental deficit on the Sapir Developmental Scale were placed in one of two groups. Twelve children in an experimental group comprised a self contained class and were given deficit centered training. The six in the control group were placed with 12 children without problems and given the traditional curriculum without deficit centered training. In the deficit centered program emphasis was placed on sensory stimulation in a carefully planned environment. The experimental group did significantly better on many, but not all of the intellectual, perceptual, and language tests; but data on academic achievement failed to show significant differences. Two factors are noted which might have contributed to the results: children who develop unevenly may have a distinctive learning pattern and process information differently, and neurological impairment could have a negative effect on academic performance regardless of WISC IQ. These factors and questions raised by the study are discussed. (RJ)

ABSTRACT 22437

EC 02 2437 ED 033 757
Publ. Date Sep 68 21p.

**Ayres, A. Jean
Effect of Sensorimotor Activity on Perception and Learning in the Neurologically Handicapped Child. Final Progress Report.**

University of Southern California, Los Angeles
Children's Bureau (DHEW), Washington, D. C.
EDRS mf,hc

Descriptors: exceptional child research; academically handicapped; behavior patterns; elementary school students; learning disabilities; neurological defects; perceptual motor coordination; perceptual

motor learning; sensory training; academic achievement

Because some learning disorders in children may be associated with perceptual-motor dysfunction, the study tested the effects of sensorimotor treatment on learning disorders and explored the nature of neurodevelopmental disorders. In Part One, 64 neuromuscular, perceptual, and cognitive measurements made on 36 educationally handicapped children with normal IQ's were subjected to Q-technique factor analysis. The two major patterns of deficits associated with low academic achievement were auditory, language, and sequencing, and postural and bilateral integration. Part Two sought syndromes of dysfunction from an R-technique factor analysis of perceptual-motor test scores. Q-analysis subjects and additional children with academic problems were tested. Emerging factors represented types of statistical associations among behavioral parameters apt to be affected by neurodevelopmental disorders. Part Three hypothesized that educationally handicapped children in special classes receiving sensorimotor training show a greater change in perceptual-motor, language, and academic achievement scores than children receiving the equivalent amount of additional classroom instruction. Test scores failed to support this hypothesis. The major contribution of the entire project was the identification of postural and bilateral integration deficit which interfered with learning. (JF)

ABSTRACT 22894

EC 02 2894 ED 040 546
Publ. Date 69 150p.

Chalfant, James C.; Scheffelin, Margaret A.

Central Processing Dysfunctions in Children: A Review of Research. NINDS Monograph No. 9.

Illinois University, Urbana, Institute for Research On Exceptional Children
National Institute of Neurological Diseases and Stroke (DHEW), Bethesda, Maryland
EDRS mf

Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (\$1.25).

Descriptors: exceptional child research; learning disabilities; research reviews (publications); neurological defects; medical research; learning processes; sensory integration; symbolic learning; research needs; memory; auditory perception; visual perception; haptic perception; language development; written language; information processing

Research on central processing dysfunctions in children is reviewed in three major areas. The first, dysfunctions in the analysis of sensory information, includes auditory, visual, and haptic processing. The second, dysfunction in the synthesis of sensory information, covers multiple stimulus integration and short-term memory. The third area of re-

search, dysfunctions in symbolic operations, concerns auditory language, decoding and encoding written language, and quantitative language. In addition, research needs are summarized. (JD)

ABSTRACT 23302

EC 02 3302 ED N.A.
Publ. Date Mar 70 29p.
Salzinger, Kurt and Others
Training Parents of Brain-Injured Children in the Use of Operant Conditioning Procedures.
New York State Department of Mental Hygiene, New York
EDRS not available
Behavior Therapy; VI N1 P4-32 Mar 1970

Descriptors: exceptional child research; neurologically handicapped; operant conditioning; parent participation; behavior change; behavior problems; parent education; parental background

Parents of brain-injured children were trained in operant conditioning techniques, so that they could provide functional descriptions of their children's problem behaviors and then formulate and carry out behavior modification programs. Background characteristics were obtained and various tests and observations made of the parents and children in order to find objective correlates of the parents' performance and the children's response to the programs. All parents who carried out the modification programs reported them effective. Others did not comprehend or keep records, or simply did not carry out the programs. Success was related to parents' educational level and to their performance on written tests of knowledge about operant conditioning and verbal ability. Implications for parent training are discussed. (KW)

ABSTRACT 30355

EC 03 0355 ED N.A.
Publ. Date 70 137p.
Critchley, Macdonald
The Dyslexic Child.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$6.50).

Descriptors: exceptional child research; learning disabilities; dyslexia; neurology; etiology; clinical diagnosis; reading difficulty; perception

Developmental dyslexia is explored from a neurological point of view. The growth of knowledge about dyslexia is traced, and conflicting ideas on its nature and cause are discussed. Chapters deal with classification and terminology, linguistic and pedagogic considerations, maternal and socioeconomic factors in etiology, and clinical manifestations. Also covered are perceptual problems, cerebral dominance, minor neurological signs, genetic properties, and the size of the problem. Psychiatric repercussions are reviewed, and the nature of developmental dyslexia

described as the dyslexic child grows up. A lengthy bibliography is included. (KW)

ABSTRACT 30398

EC 03 0398 ED N.A.
Publ. Date Oct 70 17p.
Dykman, Roscoe and Others
Children with Learning Disabilities: Conditioning, Differentiation, and the Effect of Distraction.
EDRS not available
American Journal of Orthopsychiatry; V40 N5 P766-82 Oct 1970

Descriptors: exceptional child research; learning disabilities; conditioned response; reaction time; hyperactivity; learning processes; attention span

Eighty-two boys with learning disabilities and 34 academically adequate boys (ages 8 years to 11 years 11 months) were compared using Luria-type conditioning procedures. Three conditions were used: simple conditioning, differentiation, and differentiation in the presence of a distracting stimulus. It was found that children with learning disabilities (CLD) erred more than the control boys, and took longer to react. Hyperactive CLD had quicker reactions than hypoactive CLD. CLD averaged .10 second longer to process information. Implications and observations are discussed at length. (KW)

ABSTRACT 30399

EC 03 0399 ED N.A.
Publ. Date Oct 70 12p.
Pope, Lillie
Motor Activity in Brain-Injured Children.
EDRS not available
American Journal of Orthopsychiatry; V40 N5 P783-94 Oct 1970

Descriptors: exceptional child research; minimally brain injured; motor reactions; hyperactivity; psychomotor skills; males

Nineteen boys (ages 7-11 years) with a medical diagnosis of brain injury or minimal cerebral dysfunction, and 19 normal boys were observed individually and their behavior recorded in four experimental situations: undirected activity in a playroom, performance of a simple task and of a difficult task, and voluntary inhibition of activity. The study of the motor activity of minimally brain-injured children indicates that distinctions can be made between their hyperactivity (excessive intensity of motor activity) and restlessness (excessive proportion of time spent in motion). While the total motor activity level of the brain-injured children did not differ from that of the normal controls, their restlessness was significantly greater. (Author/KW)

ABSTRACT 30430

EC 03 0430 ED 043 994
Publ. Date Jul 70 72p.
Litchfield, Ticknor B.
A Program of Visual-Motor-Perceptual Training to Determine Its Effects upon Primary Level Children with Reading and Learning Deficiencies. Final Report.

Ramapo Central School District No. 1, Suffern, New York
New York State Education Department, Albany, Division of Research
EDRS mf,hc

Descriptors: exceptional child research; perceptually handicapped; visually handicapped; motor development; academic achievement; reading; perceptual motor development; psychomotor skills; eye hand coordination; perceptual development

The purpose of the project was to determine to what extent visual, motor, and perceptual training would improve the reading and general achievement of children with visual, motor, and perceptual deficiencies. Eighty first, second, and third graders, identified as having such handicaps by gross and fine screening instruments, were randomly divided into experimental and control groups. For 1/2 hour per day for six months, training exercises and activities were conducted in the following categories: ocular motor, movement skills, laterality and directionality, spatial judgments, eye-hand coordination, and visualization. Post-tests administered were the Fine Screening Instrument, Lorge-Thorndike IQ Test, Gates-McGinitie Reading Test, and Stanford Achievement Test. The IQ and Achievement Tests showed no gains of the experimental group over the control group. But the fine screening results showed more improvement in visual-motor-perceptual functioning by the experimental group, and anecdotal records by classroom teachers reported progress by nearly all the experimental students. (KW)

ABSTRACT 30453

EC 03 0453 ED N.A.
Publ. Date 70 176p.
Delacato, Carl H.
A New Start for the Child with Reading Problems: A Manual for Parents.
EDRS not available
David McKay Company, Inc., 750 Third Avenue, New York, New York 10017 (\$5.95).

Descriptors: exceptional child research; learning disabilities; reading difficulty; reading; neurological defects; neurology; reading diagnosis; remedial programs; Doman Delacato Method

The first half of the book recounts the author's interest in children with reading problems, his work with brain-injured children and the lessons learned from studying the brain, and how he learned to apply the knowledge gained to children with reading disabilities. His investigations concerning the development of the nervous system and its key influence on the ability to read are detailed. The second part of the book provides for parents a complete program for treating a child's reading problem at home. Included is a list for checking the child's history, directions for evaluating his development, and complete descriptions

of each step in the treatment program. (KW)

ABSTRACT 30464

EC 03 0464 ED N.A.
Publ. Date 43 349p.

Fernald, Grace M.
Remedial Techniques in Basic School Subjects.

EDRS not available
McGraw-Hill Book Company, 330 West 42nd Street, New York, New York 10036 (\$7.95).

Descriptors: exceptional child research; learning disabilities; reading difficulty; remedial instruction; remedial reading; clinical diagnosis; teaching methods; etiology; spelling; mathematics; failure factors; case studies (education)

Resulting from numerous psychological experiments to develop academic skills conducted at the Clinic School (University of California at Los Angeles), the text describes the aim of clinical psychology, the clinic school, and problems of emotional adjustment. Methods of teaching reading (including letter-by-letter, word, word group, and phonetic techniques), types of disabilities, and the application of remedial techniques to group work and in the elementary school setting are discussed. Reports on the results of work in the clinical school, remedial reading rooms in Los Angeles City Schools, and physiological and psychological causes of reading disabilities are provided. The areas of spelling and mathematics are examined in terms of failure reasons, psychological factors, and remedial methods. The application of remedial techniques to the mentally handicapped is explored, and case studies involving various disabilities are presented. Information on individual differences in imagery and specific investigations of reading disabilities are appended, and a related bibliography is included. (RD)

ABSTRACT 30520

EC 03 0520 ED N.A.
Publ. Date 70 162p.

Deutsch, Cynthia P.; Schumer, Florence
Brain-Damaged Children: A Modality-Oriented Exploration of Performance.

EDRS not available
Brunner/Mazel, Inc., 80 East 11th Street, New York, New York 10003 (\$7.95).

Descriptors: exceptional child research; neurologically handicapped; minimally brain injured; visual perception; auditory perception; tactual perception; haptic perception; perception tests; lateral dominance; sensory integration; concept formation; perceptual motor learning; perception

Performance of 39 brain-damaged children (C.A. 6-1 to 12-6) and 39 neurologically unimpaired children matched for age, sex, and socioeconomic variables was studied. Tests to measure visual, auditory, and tactile or haptic perception with various degrees of interference were administered. Also measured were

auditory discrimination, right-left discrimination, lateral dominance, modality preference, concept formation skills, and intersensory-multimodal performance. In general, findings showed that the tests could be used with the brain-injured subjects and there were good reliabilities for perceptual and perceptual-motor tasks. Test intercorrelation was not high, showing that the brain-injured child does not have a general perceptual impairment. Brain-injured subjects showed more consistency and stability within a sensory modality than did control subjects. Brain-injured subjects performed as well as normal subjects on simple, unimodal tasks, but less well on complex tasks and intersensory, multimodal tasks in visual and auditory areas. Tasks of a tactual nature and perceptual motor procedures were difficult for brain-injured subjects. On conceptual procedures, brain-injured subjects' performance appeared related to input and stimulus factors rather than conceptual inability. Implications for diagnosis and education are noted. (MS)

ABSTRACT 30534

EC 03 0534 ED N.A.
Publ. Date Oct 70 4p.

Lipton, Edward D.
A Perceptual-Motor Development Program's Effect on Visual Perception and Reading Readiness of First-grade Children.

EDRS not available
Research Quarterly; V41 N3 P402-5 Oct 1970

Descriptors: exceptional child research; primary grades; perceptual motor learning; motor development; visual perception; reading readiness

It was the purpose of the investigation to conduct a program in perceptual-motor development and to determine changes in, and assess relationships between, changes in perceptual-motor development on visual perception and reading readiness of first-grade children. Four classes were equated on the variables of age, height, sex, and weight. Two of the classes (experimental) were exposed to the perceptual-motor program for 12 weeks and the other two classes (control) took part in the conventional physical education program. All students participated in their regular classroom activities. All subjects were evaluated in perceptual-motor development, visual perception, and reading readiness prior to and immediately following the research program. The difference scores (pre- and post-test) were evaluated by two-way ANOVA to determine if there were any significant differences between groups. F ratios for the three variables tested were all significant beyond the .01 level in support of the perceptual-motor program. (Author)

ABSTRACT 30614

EC 03 0614 ED N.A.
Publ. Date 65 153p.
The Child with Central Nervous Sys-

tem Deficit: Report of Two Symposiums.

Social and Rehabilitation Service (DHEW), Washington, D. C.

EDRS not available
Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (\$0.75).

Descriptors: exceptional child research; neurologically handicapped; neurology; motor development; physiology; clinical diagnosis; physical therapy; conference reports

Presented are 18 papers from two symposiums for physical therapists dealing with the treatment of children with central nervous system deficits. Papers are primarily scientific studies of the child before and after birth with respect to etiology and growth and development patterns, supported by related anatomical, physiological, and pathological evidence. (KW)

ABSTRACT 30753

EC 03 0753 ED N.A.
Publ. Date Jan 69 8p.

Petersen, Sonya; Magaro, Peter A.
Reading and Field Dependence: A Pilot Study.

EDRS not available
Journal of Reading; V12 N4 P287-94 Jan 1969

Descriptors: exceptional child research; learning disabilities; perceptually handicapped; reading difficulty; reading skills; reading tests; identification; senior high school students; visual perception; Embedded Figures Test; field dependence

In order to examine the relationship between field dependence (defined as the ability to perceive objects separate from the organized field) and reading achievement, 20 high school students (ten from a learning disabilities class, aged 16 to 20 years) were selected. The relationships among the three variables (reading scores, IQ scores and Embedded Figures Test scores) were all found to be significant (p less than .01). Evidence indicated that field dependence, as measured by tests such as the Embedded Figures Test, was a correlate of reading achievement. The researchers also felt that there were implications for both the teaching of reading and the remediation of reading problems. (CD)

ABSTRACT 30783

EC 03 0783 ED N.A.
Publ. Date 68 11p.

Epstein, Lynn Chaikin and Others
Correlation of Dextroamphetamine Excretion and Drug Response in Hyperkinetic Children.

Johns Hopkins University, Baltimore, Maryland
Public Health Service (DHEW), Washington, D. C.

EDRS not available
Journal of Nervous and Mental Disease; V146 N2 P136-46 Feb 1966

Descriptors: exceptional child research; hyperactivity; neurologically handicapped; drug therapy; medical research; behavior change; medical treatment; dextroamphetamine

The study investigated the interaction between the response to dextroamphetamine and the ascribed cause of hyperkinesis, and characterized the patterns of drug excretion in hyperkinetic children. Ten hyperactive subjects (ages 5.75 to 9.5 years), were divided into organic (likely physical damage to CNS) and nonorganic groups. Subjects served as their own controls, half receiving a placebo first and half the amphetamine first. Pre-drug and on-drug measures were made, and urine samples analyzed for amphetamine content. Tables report detailed results of measures. In general, the physiological variables of blood pressure, pulse, respiration, and weight did not change for either group after drug administration, but fine motor coordination improved for both groups. No significant change in the critical flicker fusion frequency occurred for either group. Proteus maze test quotient improved for both groups (significantly greater for the organic group). The organic group tolerated higher doses of dextroamphetamine, perhaps because of higher and more rapid excretion. Parental and psychiatric subjective evaluations rated all of the organic group greatly improved in hyperkinetic behavior, while three of the nonorganic group did not seem to be improved in behavior. (KW)

ABSTRACT 30836

EC 03 0836 ED N.A.
Publ. Date 70 144p.
Clark, Margaret M.
Reading Difficulties in Schools.
EDRS not available
Penguin Books, Inc., 7110 Ambassador Road, Baltimore, Maryland 21207 (\$1.45).

Descriptors: exceptional child research; dyslexia; reading difficulties; reading readiness; teacher role; remedial programs; school community relationship; learning disabilities

To determine the extent to which certain variables in dyslexia were related to early reading progress in children, a community study was conducted involving 1544 children (age 7). Children considered to be backward readers were retested at eight years of age. The third part of the study concerned the small number of children of average intelligence who continued to have difficulty with reading. It was found that about 15% of the children showed independent reading skill after two years of school. Adequate motor coordination was shown by only 31.8% of the children at age seven. In general, it was noted that the difficulties of the problem readers were not specific to the problem of deciphering words on a printed page; there was a diversity of disabilities and not a common pattern to the group. Implications

for the role of the teacher and of the remedial service were assessed. (CD)

ABSTRACT 30863

EC 03 0863 ED N.A.
Publ. Date Nov 70 5p.
Ferinden, William E.; Jacobson, Sherman
Early Identification of Learning Disabilities.
EDRS not available
Journal of Learning Disabilities; V3 N11 P589-93 Nov 1970

Descriptors: exceptional child research; learning disabilities; predictive ability (testing); identification; kindergarten children; early childhood; predictive validity; teacher role

Sixty-seven kindergarten children were screened for potential learning disabilities. Test profiles indicated that teachers' observations were useful (80%) in the selection of potential learning problems. The Wide Range Achievement Test and the Evanston Early Identification Scale were found to be reliable instruments for predicting which kindergarten children would not experience success in reading in the first grade. The Bender Gestalt Visual Motor Test was not a reliable instrument for prediction at this level. The Metropolitan Reading Test was an effective predictor only if the total test scores fell below the 30th percentile. (Author)

ABSTRACT 30918

EC 03 0918 ED N.A.
Publ. Date Dec 70 11p.
Zedler, Empress Y.
Educating Programming for Pupils with Neurologically Based Language Disorders.
EDRS not available
Journal of Learning Disabilities; V3 N12 P618-28 Dec 1970

Descriptors: exceptional child research; learning disabilities; program planning; language handicapped; neurological defects; regular class placement; drug therapy; educational planning

Fifty matched pairs of otherwise normal, underachieving pupils with neurologically based language-learning disorders were divided into experimental and control groups. Experimental subjects remained in regular classes in school and received individualized teaching outside of school hours from specially trained clinicians. Control subjects were enrolled in special education classes and did not receive clinical teaching after school. Half of the experimental and half of the control subjects had anticonvulsive medication prescribed by their physicians. The groups were pre- and post-tested for changes in academic achievement and mental functioning. Experimental groups made significantly greater gains in both variables than did the control groups. Medicated groups did not make greater gains when compared with unmedicated groups. Implications are that schools should refrain from referring such children to special education classes, and that they

should leave them in regular classes and provide them with individualized supplementary teaching outside of regular school hours. (Author)

ABSTRACT 31037

EC 03 1037 ED N.A.
Publ. Date Feb 68 8p.
Diller, Leonard; Weinberg, Joseph
Attention in Brain-Damaged People.
EDRS not available
Journal of Education; V150 N3 P20-7 Feb 1968

Descriptors: exceptional child research; learning disabilities; neurologically handicapped; minimally brain injured; research reviews (publications); rehabilitation; attention span

Citing research in the field, the authors explore the problems of attention in brain damaged people. The schools of thought (grounded in an experimental or clinical tradition) dealing with brain damage are presented and the problem of rehabilitation which goes beyond these schools is advanced. Attention problems in brain injured people in relation to their retraining is dealt with. The authors indicate that identification of steps pertinent to the breakdown in the skill and the strategies which patients can use to overcome the breakdowns is an important problem in the re-education of individuals with brain damage. (CD)

ABSTRACT 31219

EC 03 1219 ED N.A.
Publ. Date 70 177p.
Cratty, Bryant J. and Others
Movement Activities, Motor Ability and the Education of Children.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$9.75).

Descriptors: exceptional child research; learning disabilities; mentally handicapped; perceptual motor learning; arousal patterns; cognitive processes; movement education

Movement activities, motor ability and education of children are examined. Four experiments are reported, investigating the manner in which movement contributes or detracts from other goals educators set. The findings were felt to be highly promising, indicating, for instance, that certain perceptual attributes may be modified by a properly applied program of motor activity. The remaining parts of the text contain essays on cognition, motor learning, and the manner in which activity arousal level may detract or enhance intellectual functioning. (CD)

ABSTRACT 31288

EC 03 1288 ED N.A.
Publ. Date 70 32p.
Amante, Dominic
The Epidemiological Distribution of CNS Dysfunction.
EDRS not available
Journal of Social Issues; V26 N4 P105-36 Fall 1970

Descriptors: exceptional child research; disadvantaged groups; learning disabilities; neurologically handicapped; social psychology; socioeconomic influences; urban environment; prevention; theories; biological influences

The authors explore some of the ways in which social factors may interact with biological and/or psychological variables to produce brain damage. They see the cases of brain damage in children as being highly concentrated in the poor white and black segments of the urban population. A multi-disciplinary theoretical scheme is presented which is designed to conceptualize the distribution in terms of a series of antecedent and consequent conditions involving the interaction of biological, psychological, educational, sociological, and anthropological variables. A major factor or cause behind the distribution is seen as general ethnocentrism (one variant of which is racism). Prevention is indicated to be the most critical problem at the present time. (Author/CD)

ABSTRACT 31304

EC 03 1304 ED N.A.
Publ. Date Jan 71 8p.
Crowley, Harry L.; Ellis, Bessie
Cross Validation of a Method for Selecting Children Requiring Special Services in Reading.
EDRS not available
Reading Teacher: V24 N4 P312-9 Jan 1971

Descriptors: exceptional child research; reading difficulty; test validity; predictive validity; predictive ability (testing); reading tests; remedial reading; identification; reading reinforced method

A technique proposed by Durost (1962), called the reading reinforced method, was applied as a cross validation of the selection of third grade students for a remedial reading program for purportedly disabled readers in grades 1-4. Students were originally selected on the basis of normal IQ performance on the Metropolitan Elementary Reading Test (MERT), and inadequate classroom performance as judged by the classroom teacher. The reading reinforced technique is based on the premise that a child's listening vocabulary exceeds his reading vocabulary. Children with specific correctible difficulties will show gains in test scores when the teacher reads the test aloud to reinforce the child's silent reading. A child who does show large gains under reinforcement is then a good choice for corrective reading instruction. The MERT was administered, then later another form of the test which the teacher reinforced by reading aloud. Comparison of the test scores would determine the potential for reading improvement, according to the hypothesis. Any gains on the reinforced test were compared with reading scores at the end of the program to see if in fact those students did improve in reading ability and were therefore appropriately selected. Four

tables present testing data. It was concluded that the reading reinforced technique is generally a successful method of selecting students who need and will benefit from special reading services, supplementing the value of the teachers' recommendations. (KW)

ABSTRACT 31331

EC 03 1331 ED N.A.
Publ. Date Jan 71 5p.
Meier, John H.
Prevalence and Characteristics of Learning Disabilities Found in Second Grade Children.
EDRS not available
Journal of Learning Disabilities; V4 N1 P7-21 Jan 1971

Descriptors: exceptional child research; learning disabilities; state surveys; elementary school students; psychoeducational processes; sequential learning; individualized instruction; incidence; grade 2

Findings were presented from two studies to determine the prevalence and characteristics of individual learning disabilities existing in 110 second grade classes in eight Rocky Mountain States. Approximately 15% of more than 3000 children in the sample revealed some specific learning disorder which was frequently associated with sequencing difficulties. Three levels of diagnosis were employed: the informed judgment of teachers, using a new classroom teaching procedure (described in the document), was related to the findings of psychoeducational and medical diagnosticians. An individualized instructional system which is being developed for the remediation and/or prevention of learning disorders was outlined. (CD)

ABSTRACT 31496

EC 03 1496 ED N.A.
Publ. Date 70 6p.
Keogh, Barbara K.; Smith, Carol E.
Early Identification of Educationally High Potential and High Risk Children.
EDRS not available
Journal of School Psychology; V8 N4 P285-90 Win 1970

Descriptors: exceptional child research; gifted; learning difficulties; academic achievement; prediction; identification; academic aptitude; screening tests; predictive ability (testing); followup studies; student evaluation; elementary school students; Bender Gestalt Test

Early identification of educationally high potential and high risk children was investigated by following 49 children from kindergarten entrance through grades 5 of a regular school program. Kindergarten predictive measures were the Bender Gestalt and teachers' evaluations. Follow-up measures were yearly standard achievement test results. Analyses revealed consistently high and significant relationships between teachers' ratings and subsequent school achievement. Teachers were surprisingly

accurate in early identification of both high risk and high potential children. The Bender was more accurate for identification of high potential than high risk children. Findings support the use of these measures for initial screening of children entering formal school programs. Specification of dimensions of teachers' evaluations may provide clues to understanding the complexities of school readiness. (Author)

ABSTRACT 31505

EC 03 1505 ED 047 435
Publ. Date 71 14p.
Bursuk, Laura Z.
Sensory Mode of Lesson Presentation as a Factor in the Reading Comprehension Improvement of Adolescent Retarded Readers.
New York University, New York, York College
EDRS mf, hc
Research Paper Presented at the Annual Convention Of the American Educational Research Association (New York, New York, February, 1971).

Descriptors: exceptional child research; reading difficulty; teaching methods; remedial instruction; sensory integration; adolescents; reading comprehension

To compare the effectiveness of an experimental correlated, combined aural-visual remedial reading instructional approach with that of a conventional, predominantly visual approach, 96 adolescent retarded readers (age 14 to 16 years, IQ 92 to 114, reading grade levels 7 to 9) were classified according to their sensory modality learning preferences and were exposed to the two remedial techniques three times a week for one semester. Results were that pupils in the experimental group receiving combined aural-visual instruction showed significantly greater growth in reading than did the pupils in the control group receiving predominantly visual instruction. There was also a significant interaction between pupils' sensory modality learning preferences and the relative effectiveness of the sensory teaching approach used. The experimental approach appeared to be more effective with auditory learners and learners with no sensory modality learning preference, while the control approach was more effective with visual learners. (RD)

ABSTRACT 31543

EC 03 1543 ED N.A.
Publ. Date 58 285p.
Haeussermann, Else
Developmental Potential of Preschool Children.
EDRS not available
Grune and Stratton, Inc., 757 Third Avenue, New York, New York 10017 (\$12.00).

Descriptors: exceptional child research; neurologically handicapped; learning disabilities; testing; test construction; intelligence tests; preschool tests

Designed for those psychologists, teach-

ers and therapists who are concerned with the problem of evaluating the young handicapped child, the book offers what is felt to be a common sense approach to the educational evaluation of children between 2 and 6 years of age (or functioning on that level) who have handicaps in expression and other difficulties. The method presented is the result of experimental exploration rather than of statistical compilation. It consists of a structured interview, with suggestions concerning modification of items methodically, when the clinical evaluation calls for an exploration of deviations or deficits in functioning. The method proceeds from higher levels of adaptive organization to lower ones (abstract relations to concrete events). The text also embodies years of clinical experience gained in work with neurologically handicapped children. The problems of motivating such children, of managing hyperactivity, of controlling distractibility, and of compiling an accurate developmental history are incorporated into the evaluation procedure. (CD)

ABSTRACT 31556

EC 03 1556 ED N.A.
 Publ. Date 70 533p.
 Young, Francis A., Ed.; Lindsley, Donald B., Ed.
Early Experience and Visual Information Processing in Perceptual and Reading Disorders.
 National Research Council, Washington, D. C.
 Public Health Service (DHEW), Bethesda, Maryland
 EDRS not available
 Printing and Publishing Office, National Academy Of Sciences, 2101 Constitution Avenue, Washington, D. C. 20418 (\$9.95).
 Proceedings of A Conference (Lake Mohonk, New York, Oct 27-30, 1968).

Descriptors: exceptional child research; learning disabilities; perceptually handicapped; reading difficulty; visual perception; vision; visual learning; cognitive development; visual stimuli; infancy; neurology; conference reports

Both prepared manuscripts and conference discussions are included in the proceedings of a conference held October 27-30 at Lake Mohonk, N.Y., in association with the Committee on Brain Sciences of the National Research Council. Attended by researchers (psychologists, neurophysiologists, neuroanatomists) in the areas of vision, audition, perception, and cognition, physicians diagnosing and treating children with reading and perceptual disabilities, and educators, the conference aimed at integrating basic knowledge of structure and mechanisms of eye and brain with their function and their behavioral roles in perception. Focused upon were underlying factors that may contribute to reading disorders. Emphasized in the consideration of the role of early experience in visual information processing was the importance of exteroceptive stimulation of the infant.

Eleven papers consider optical and oculomotor, retinal, and central neural factors in defining the role of the visual system. Attentional and perceptual mechanisms are discussed in four papers, while seven examine early experience and learning in visual information processing. Attention is given to the role of information processing in perceptual and reading disabilities in three papers, and two papers center on the management of children with perceptual and reading disabilities. (KW)

ABSTRACT 31653

EC 03 1653 ED N.A.
 Publ. Date Feb 71 5p.
 Kenny, Thomas J.; Clemmens, Raymond
Medical and Psychological Correlates in Children with Learning Disabilities.
 EDRS not available
 Journal of Pediatrics; V78 N2 P273-7 Feb 1971

Descriptors: exceptional child research; learning disabilities; medical evaluation; minimally brain injured; psychological evaluation; neurology; electroencephalography; diagnostic tests; behavior problems; neurological defects

Data are presented on 100 children with learning and/or behavioral problems who were referred to a diagnostic and evaluation clinic because of suspected minimal brain dysfunction. Each child received thorough medical and psychological examinations. Electroencephalograms were done on 88 of the children. A chi square interaction analysis was set up comparing the results of the neurologic examination, electroencephalogram, and final diagnosis. There was no significant relationship among any of these factors, nor was there any combined or additive effect. The results indicate that the final diagnosis is more contingent upon symptomatology and psychological findings than upon any specific medical, neurologic, or electroencephalographic findings. In view of the poor correlation of the neurologic examination and the electroencephalogram with the final diagnosis, there appears to be minimal utility in referring such children routinely for these procedures. (Author)

ABSTRACT 31658

EC 03 1658 ED N.A.
 Publ. Date 67 189p.
 Delacato, Carl H.
Neurological Organization and Reading.
 EDRS not available
 Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$7.50).

Descriptors: exceptional child research; learning disabilities; reading difficulty; neurologically handicapped; neurological defects; theories; research projects

The concept of neurological organization as the basis of reading problems is proposed, including the proposition that language problems can be diagnosed and treated through the assessment and mod-

ification of neurological organization. An overview of the concept of neurological organization and its basic premises touches upon phylogenetics, ontogeny, diagnosis, treatment, etiology, and prevention. Following this summarization, the concept is subjected first to philosophic and then to scientific scrutiny. The philosophic evaluation includes an attempt to relate the concept to past ideas on the human nervous system and reading. The scientific appraisal consists of the presentation of reports on 10 controlled statistical studies which tested the Neurological Organization theory. The studies are presented without comment by the author. (KW)

ABSTRACT 31723

EC 03 1723 ED N.A.
 Publ. Date Mar 71 5p.
 Edwards, R. Philip and Others
Academic Achievement and Minimal Brain Dysfunction.
 EDRS not available
 Journal of Learning Disabilities; V4 N3 P134-8 Mar 1971

Descriptors: exceptional child research; learning disabilities; neurologically handicapped; academic achievement; predictive validity

To investigate a possible predictive relationship between a diagnosis of minimal brain dysfunction (MBD) and the child's academic achievement, comparisons were made between groups of children with various combinations of the following findings: positive neurological and/or visual-motor findings and negative neurological and/or visual-motor findings. The subjects within each comparison were matched by IQ and chronological age. The dependent variables were grade level scores in word recognition, arithmetic, and spelling as measured by the Wide Range Achievement Test. Analysis of variance performed computed for each comparison failed to reveal significant differences. The results provide no evidence that a diagnosis of minimal brain dysfunction based on a pediatric neurological evaluation and/or visual-motor impairment as measured by the Bender-Gestalt, is a useful predictor of academic achievement. (Author)

ABSTRACT 31726

EC 03 1726 ED N.A.
 Publ. Date Mar 71 17p.
 Ackerman, Peggy T. and Others
Children with Specific Learning Disabilities: WISC Profiles.
 EDRS not available
 Journal of Learning Disabilities; V4 N3 P150-66 Mar 1971

Descriptors: exceptional child research; learning disabilities; intelligence level; intelligence tests; Wechsler Intelligence Scale for Children

Eighty-two children with specific learning disabilities (CLD) and 34 controls with adequate academic performance were given the Wechsler Intelligence Scale for Children (WISC). The CLD group scored

lower, on the average, than the control group, particularly on Arithmetic, Digit Span, Information, and Similarities. For 29 CLD-control pairs, matched for chronological age and mental age, the verbal superiority of controls was more rigorously demonstrated. No characteristic WISC profiles were found for CLD grouped as to activity level and neurological status. Serious reading disabilities were associated more reliably with verbal deficiencies than with nonverbal deficits as tapped by the WISC performance scale, but the study demonstrated that the child with either a Verbal or Performance IQ in the low average or dull normal range appears high risk for a smooth academic career in middle-class urban schools. (Author)

ABSTRACT 31755

EC 03 1755 ED N.A.
 Publ. Date Feb 71 12p.
 Stavrianos, Bertha K.
Can Projective Test Measures Aid in the Detection and Differential Diagnosis of Reading Deficit?
 EDRS not available
 Journal of Personality Assessment; V35 N1 P80-91 Feb 1971

Descriptors: exceptional child research; learning disabilities; reading difficulty; projective tests; identification; reading diagnosis; psychological characteristics

Comparison of Bender, House-Tree-Person, and Rorschach measures for good readers and three types of poor readers among preadolescent boys indicated that high organic, constricted scores and immature Rorschach patterns characterized poor readers. Lower organic scores and expansive reactions suggested emotional deficit. Withdrawn, constricted, dependent patterns and high F- suggested specific deficit. Combined scores identified deficit and differentiated between emotional and specific deficit for 98%, and between organic and non-organic deficit for 90% of cases. Projective tests can aid in diagnosis of reading deficit. (Author)

ABSTRACT 31792

EC 03 1792 ED N.A.
 Publ. Date Feb 71 11p.
 Berry-Luterman, Lillian; Bar, Asher
The Diagnostic Significance of Sentence Repetition for Language Impaired Children.
 EDRS not available
 Journal of Speech and Hearing Disorders; V36 N1 P29-39 Feb 1971

Descriptors: exceptional child research; learning disabilities; language handicapped; sentence structure; language tests; diagnostic tests; language ability

The procedure of sentence repetition, described in the study, would seem to provide a valuable, simple tool to assess the linguistic performance of a language-impaired subject. It enables the performance of each individual subject to be compared with his own previous production. It provides a means for observing

and analyzing any shift in production under the other two conditions which the subject may make. As such, the procedure enables the interviewer to examine and assess the grammatical performance and to infer or hypothesize about each subject's linguistic competence. Further recommendations might involve the comparison of children who are culturally disadvantaged with those diagnosed as language-impaired. A possible difference might be the former's ability to shift production when a correct model is presented for repetition. Another implication might involve the possible correlation of a subject's ability to produce structures in the sentence repetition task with test scores on various standardized language tests. (Author)

ABSTRACT 31815

EC 03 1815 ED N.A.
 Publ. Date 55 266p.
 Strauss, Alfred A.; Kephart, Newell C.
Psychopathology and Education of the Brain-Injured Child, Volume II, Progress in Theory and Clinic.
 EDRS not available
 Grune and Stratton, Inc., 381 Park Avenue South, New York, New York 10016.

Descriptors: exceptional child research; minimally brain injured; psychopathology; learning disabilities; neurological defects; cognitive processes; theories

The volume treats both the theory and clinically-related aspects of brain-injury. The anatomy and physiology of the central nervous system as related to brain-injury in children are discussed, as is embryology as it relates to brain-injury. The psychopathology of perception, of language, of concept formation, and of behavior are examined in turn. Attention is also given to testing the brain-injured child with normal IQ, and some preliminary conclusions affecting the education of such children. The concluding chapter offers a set of speculations on the mental functioning of brain-injured children to bridge the gaps in knowledge not yet filled in by scientific inquiry. Appended are a scoring guide to the Marble Board Test and the Ellis Design Test, and eight case histories of brain-injured children with normal IQ. (KW)

ABSTRACT 31966

EC 03 1966 ED N.A.
 Publ. Date Apr 71 11p.
 Ferinden, William E. and Others
A Supplemental Instructional Program for Children with Learning Disabilities.
 EDRS not available
 Journal of Learning Disabilities; V4 N4 P193-203 Apr 1971

Descriptors: exceptional child research; learning disabilities; program descriptions; perceptual development; perceptual motor learning; remedial programs

An 8-month program for remediation of learning disabilities is discussed. The children remained in the regular educa-

tional program while receiving supplemental instruction in academics and perception, using techniques and innovations mentioned. Significant improvement was obtained in arithmetic and perception. A long period of supplemental instruction (20 months) was required before significant gains were recorded in reading. Educational implications and a possible extension of this study are discussed. (Author)

ABSTRACT 31967

EC 03 1967 ED N.A.
 Publ. Date Apr 71 5p.
 Holloway, Gordon F.
Auditory-Visual Integration in Language-Delayed Children.
 EDRS not available
 Journal of Learning Disabilities; V4 N4 P204-8 Apr 1971

Descriptors: exceptional child research; learning disabilities; retarded speech development; visual perception; auditory perception; perceptual motor coordination; perception; psycholinguistics

Twelve language-delayed children with non-specific etiologies were matched with children having normal language development for age, sex, and IQ. Measurement of auditory-visual integrative ability, visual-motor integrative ability, and perception of distorted speech revealed the two groups to be significantly different in the auditory-visual component and perception of distorted speech, but not in visual-motor integrative ability. (Author)

ABSTRACT 31970

EC 03 1970 ED 048 698
 Publ. Date 71 74p.
 Carman, Mary Ann and Others
A National Directory of Four Year Colleges, Two Year Colleges and Post High School Training Programs for Young People with Learning Disabilities.
 East Texas State University, Commerce Association for Children With Learning Disabilities. Pittsburgh, Pennsylvania
 EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; college admission; directories; questionnaires; educational opportunities; colleges

The 908 positive replies to questionnaires sent to 4-year colleges, 2-year colleges and post-highschool training programs have been compiled into a directory for youth with learning disabilities. Two major areas of interest were admission policies and curriculum modifications. Colleges which indicated that the learning disabled are admitted are listed by state, as are the post-highschool training programs. Some colleges which replied that the learning disabled are not accepted are listed; their inclusion is based on indications from the questionnaire that some modifications or special programs might be available. Recommendations are made for additional research. (RJ)

ABSTRACT 31993

EC 03 1993 ED 046 717
 Publ. Date 71 529p.

Hellmuth, Jerome, Ed.

Exceptional Infant: Studies in Abnormalities.

EDRS not available
 Brunner/Mazel, Inc., 80 East 11th Street,
 New York, New York 10003 (\$15.00).

Descriptors: exceptional child research; infancy; psychopathology; child development; anomalies; prenatal influences; infant behavior; neurology; medical evaluation; motor development; mother attitudes; learning theories; premature infants

Designed as a complement to Volume 1 on the normal infant (available as EC 003 414), the text examines the following areas: neurological examination of the newborn, neurobehavioral organization of the newborn, neuropsychology examinations in young children, learning of motor skills on the basis of self-induced movements, factors in vulnerability from infancy to later age levels, smiling and stranger reaction in blind infants, and the Maternal Personality Inventory. Topics are presented on prenatal and perinatal factors which influence learning, individual differences in the measurement of early cognitive growth, the genesis and pathogenesis of speech and language, the auditory environment in relation to language, a theoretical and research base for a program of early stimulation care and training of premature infants, and changes over time in the incidence and prevalence of mental retardation. Behavior disorders and psychopathology are explored through studies on minor physical anomalies and hyperactivity, brain pathology and antisocial disorders, a comparison of infant-mother interaction in infants with typical and atypical behavior, influence of perinatal drugs on neonate behavior, maternal perceptions of the first born, environmental factors, theories of schizophrenia, and abnormal social behavior in young monkeys. (RD)

ABSTRACT 32017

EC 03 2017 ED N.A.
 Publ. Date Apr 71 7p.
 Mordock, John B.

Behavioral Problems of the Child with Minimal Cerebral Dysfunction.

EDRS not available
 Physical Therapy; V51 N4 P398-404 Apr 1971

Descriptors: exceptional child research; learning disabilities; minimally brain injured; behavior patterns; psychological characteristics; research reviews (publications); behavior problems

Focusing on behaviors observed in children with diffuse brain damage, often termed minimal cerebral dysfunction, the article lists in order of frequency behavior characteristics most often cited by clinicians as typical of such children. Five of the first six behavioral manifestations listed are examined and research findings related to these behaviors are

presented. Discussed are hyperactivity, emotional lability, disorders of attention, impulsivity, and general coordination deficits. It is suggested that, although physical inadequacy, social inadequacy, and coordination deficits were found to be present in the majority of brain-impaired children, other behaviors considered were no more frequent in brain-impaired children than in other emotionally disturbed children, and, when present, were characteristic only of a subgroup among the brain-impaired. (KW)

ABSTRACT 32071

EC 03 2071 ED N.A.
 Publ. Date Apr 71 242p.
 Wender, Paul H.

Minimal Brain Dysfunction in Children.

EDRS not available
 John Wiley and Sons, Inc., 605 Third Avenue, New York, New York 10016 (\$10.50).

Descriptors: exceptional child research; learning disabilities; minimally brain injured; neurological defects; clinical diagnosis; etiology; psychological characteristics; medical treatment; theories; hyperactivity; drug therapy

Both theoretical and clinical aspects of the disorder known as minimal brain dysfunction (MBD) or hyperactive behavior disorder are discussed. With detailed coverage of both aspects, the volume is intended to be of particular interest to pediatricians and child psychiatrists, and perhaps also to clinical psychologists and special educators. For the practitioner, extensive descriptive data on the following major topics are presented: characteristics and clinical signs of MBD, etiology, prevalence, diagnosis, prognosis, and management (including drug management, methods of psychological management for child and family, and educational intervention). For the theoretician, the final part of the book is devoted to a discussion of the theoretical basis of the MBD syndrome. Psychological and physiological theories of causation are considered, and, in conjunction with the latter, a neurological and biochemical model of the MBD syndrome to explain the etiology of some forms of MBD is presented in detail. Twelve case histories are appended. (KW)

ABSTRACT 32222

EC 03 2222 ED 050 508
 Publ. Date 69 37p.

Study of Students from Special Classes Who Have Been Returned to Regular Classes.

Scarborough Board of Education, Ontario, Canada
 EDRS mf.hc

Descriptors: exceptional child research; learning disabilities; regular class placement; social adjustment; student evaluation; questionnaires; interpersonal competence

The purpose of the study was to assess the impact of regular class placement on learning problem students. Consideration was given to academic achievement, personal and social adjustment, peer relationship, and students' perceptions of the class. Fifty-seven learning problem students were selected from four types of learning disabilities classes: opportunity (educable, slow learner), perceptual, behavioral (including multiply handicapped), and special reading. Questionnaires distributed to the class teacher and interviews with the children were used to collect data. According to the teachers' evaluations, all groups but the opportunity class group achieved according to expectation. Overall personal and social adjustment, as perceived by the teachers, was considered similar for all groups. The special students were shown to give favorable responses to questions related to their feelings about the regular class. It was revealed by comparison that the opportunity class students were the most positive of the groups. Samples of the teacher questionnaire and student interview questions are included in the appendix. (CD)

ABSTRACT 32233

EC 03 2233 ED 049 595
 Publ. Date Jan 71 170p.
 Sonstegard, Manford A.; Tseng, Meng-Shu

Development of Criteria for the Identification of Pre-School Children with Learning Problems. Final Report.

West Virginia University, Morgantown
 Northern Iowa University, Cedar Falls;
 Office of Education (DHEW), Washington, D. C.; Bureau of Research
 EDRS mf.hc
 OEG-3-9-580024-0049(010)
 BR-9-C-024

Descriptors: exceptional child research; learning difficulties; longitudinal studies; academic achievement; identification; preschool evaluation; emotional problems; attention span; attitudes; self concept; social adjustment; age differences; parent attitudes

To identify variables which inhibit social and academic adjustment, 42 kindergarten students were studied longitudinally by means of parent interviews, observation, tests, and anecdotal records. The IQ score for the group remained normal to slightly above over the 8-year period, but individual scores tended to vary more with increased age. Underachieving students in reading were compared to their achieving classmates; in grade 3 there was a significant difference between the two groups on the level of discouragement. By sixth grade the underachievers exhibited a less desirable social adjustment and participated less in class discussions. Short attention span and sensitivity about weight and speech were recurring characteristics of underachievers. The feeling of having a place among his peers and being assured of it, and a feeling of personal worth and appreciation were the only variables that contin-

ued to correlate consistently with the child's overall academic accomplishment throughout the first nine years of school. Additional results, conclusions, and suggestions are reported. (RJ)

ABSTRACT 32235

EC 03 2235 ED 050 518
Publ. Date 70 21p.
Satz, Paul and Others
An Evaluation of a Theory of Specific Developmental Dyslexia.
Florida University, Gainesville
EDRS mf,hc

Descriptors: exceptional child research; learning disabilities; dyslexia; maturation; etiology; theories; reading difficulty

Hypotheses accounting for the pattern of deficits in specific developmental dyslexia were examined. The theory postulates that the disorder reflects a lag in maturation of the central nervous system, particularly the left cerebral hemisphere. The hypotheses in question predicted that skills developing ontogenetically earlier (visual-motor and auditory-visual integration) will be more delayed in younger dyslexic children (ages 7-8 years), and that skills developing later (language and formal operations) will be more delayed in older dyslexic children (ages 11-12 years). Subjects were 20 disabled male readers and 20 control males, all of average or above average intelligence. Each group was subdivided by age: younger (ages 7-8) and older (ages 11-12). Three tests classified as nonlanguage or perceptual and three classified as language tests were administered. The nonlanguage tests were postulated to represent skills developing ontogenetically earlier. The nonlanguage tests partially discriminated between younger dyslexics and controls, while none of the nonlanguage tasks discriminated between the older groups. By contrast, the language tasks revealed significant differences between older dyslexics and controls, while only one language measure discriminated between the younger groups, thus substantially supporting the hypotheses under evaluation. (KW)

ABSTRACT 32274

EC 03 2274 ED N.A.
Publ. Date May 71 5p.
Alley, Gordon R. and Others
Minimal Cerebral Dysfunction as It Relates to Social Class.
EDRS not available
Journal of Learning Disabilities; V4 N5 P246-50 May 1971

Descriptors: exceptional child research; minimally brain injured; socioeconomic influences; socioeconomic status; learning disabilities

The relationship of minimal cerebral dysfunction to socioeconomic status was investigated in a midwestern child development clinic population. Two previous reports were contrasted, one stating that minimal cerebral dysfunction (MCD) occurred predominantly in the lower socioeconomic strata, the other suggesting

that this was more prevalent in the upper classes. It was concluded that: MCD is distributed proportionately with a diagnosis of normal among five social classes; MCD, regardless of the presence or absence of an associated behavior disorder, does not change in its proportional incidence in all social class levels when compared to a normal group; within the MCD group, the presence or absence of an associated behavior disorder does not change the proportion of incidence in the five social class levels. The importance of the sampling population and the background and attitude of the clinician as a possible variable in formulating a diagnosis are discussed. (Author)

ABSTRACT 32376

EC 03 2376 ED 050 533
Publ. Date 70 28p.
Wieder, Daniel; Hicks, John
Evaluation of an Early Intervention Program for Neurologically Impaired Children and Their Families.
United Cerebral Palsy of Queens, Inc., Jamaica, New York
Association for the Aid of Crippled Children, New York, New York
EDRS mf,hc

Descriptors: exceptional child research; neurologically handicapped; cerebral palsy; parent counseling; program evaluation; intervention; child development; parent attitudes; counseling effectiveness; emotional adjustment

The final project report evaluates services to young infants and their parents in an early intervention program for neurologically handicapped (cerebral palsied) children. Following a general report of the 1969-70 activities, evidence from evaluation research in three areas is presented. Studied were the effects of group therapy on the parents of infants, the effects of the program on the emotional adjustment of the parents and their attitudes toward raising children, and effects of the program on the physical, social-emotional, and intellectual development of the 23 children, ages 9-44 months, who participated in the intervention program two mornings per week. Evidence suggested that in general the parents became less apprehensive and more self-assured in their reactions. Adjustment to the crippled child appeared to be more difficult for the mother than the father, and mothers had more need of counseling services. The program was more successful in affecting the adjustment and attitudes of mothers than fathers. Positive shifts were recorded in mothers' attitudes toward the child's disability and toward themselves. Pre- and posttesting with the Children's Developmental Schedule, and experimental rating scale, showed significant growth in the areas of physical, social and emotional, and intellectual growth in one of the two groups of children. (KW)

ABSTRACT 32481

EC 03 2481 ED N.A.
Publ. Date 70 211p.

Francis-Williams, Jessie
Children with Specific Learning Difficulties.

EDRS not available
Pergamon Press, Inc., Maxwell House, Fairview Park, Elmsford, New York 10523.

Descriptors: exceptional child research; learning; disabilities; identification; preschool children; preschool evaluation; educational diagnosis

The possibilities of early identification of children of normal intelligence with specific learning disorders believed to arise from neurodevelopmental dysfunction are discussed. Following a summary of normal mental development and early childhood learning, research into means of identification of learning difficulties is reported. Examined are various tests and rating scales which were determined to be useful discriminators. Reported are the differences in performance on the test battery selected of 44 preschool children noted at birth as having minor neurological dysfunction and 63 controls who were normal in development. Symptoms indicative of dysfunction in a child 3-5 years old are enumerated. Also discussed are methods of helping preschool children and identification of learning disabilities in school children. Teaching experiments with children having specific learning disabilities are surveyed. Appended is an historical survey of research on various aspects of learning disabilities. (KW)

ABSTRACT 32534

EC 03 2534 ED N.A.
Publ. Date Jun 71 9p.
Kaspar, Joseph C. and Others
A Study of the Relationship Between Neurological Evidence of Brain Damage in Children and Activity and Distractibility.

EDRS not available
Journal of Consulting and Clinical Psychology; V36 N3 P329-37 Jun 1971

Descriptors: exceptional child research; learning disabilities; neurologically handicapped; minimally brain injured; hyperactivity; adjustment (to environment)

A group of 24 boys and 12 girls between 5 and 8 years of age with neurological evidence of brain damage was compared to a control group (matched for sex) on a series of measures of activity and distractibility. Although the average IQs of both groups were within the normal range, control subjects were found to be significantly more intelligent. In a structured situation, brain-damaged subjects were more active than the control subjects. In three of four distractibility tasks employed, more brain-injured subjects than control subjects were found to be distractible. In the free situation, an interaction between sex and damage was found. Correlational analysis of the experimental and control groups indicated that a strong set of interrelationships existed between variables in the experimental group. Central to these relationships

was the input modality through which the stimuli were transmitted. The data were interpreted as indicating that brain injury affects the child's capacity to control his immediate exchanges with his environment in terms of activity level and attention. (APA)

ABSTRACT 32722

EC 03 2722 ED 052 563
Publ. Date 71 366p.
Tarnopol, Lester, Ed.

Learning Disorders in Children: Diagnosis, Medication, Education.
EDRS not available
Little, Brown and Company, 34 Beacon Street, Boston, Massachusetts 02106.

Descriptors: exceptional child research; learning disabilities; medical treatment; medical evaluation; neurological defects; drug therapy; psychological evaluation

Nine papers dealing with educational, psychological, and medical aspects of the management of children with learning disabilities focus upon the medically-related aspects and information which would be useful to a multidisciplinary team in coordinating differential diagnostic efforts and instituting remediation programs. Discussions of the relationship between learning problems and neurological dysfunction, diagnosis and medical management using medication, and the relationship of medical management to educational procedures are aimed primarily at physicians. Following an introductory paper on neurogenic learning disorders, two case histories (including evaluations based on diagnostic tests and recommendations for remediation) are presented. Other papers treat medical responsibilities, the use of drugs in diagnosis and treatment, the neurology of learning disabilities, psychological diagnosis and remediation in relation to brain damage and learning disabilities, and the clinical pharmacology of psychotropic drugs with special reference to children. Also included are the proceedings of a panel of physicians and psychologists discussing management via medication. (KW)

ABSTRACT 32836

EC 03 2836 ED N.A.
Publ. Date Jul 71 5p.

Wagner, Rudolph F.; Guyer, Barbara P.
Maintenance of Discipline through Increasing Children's Span of Attention by Means of a Token Economy.
EDRS not available
Psychology in the Schools; V8 N3 P285-9 Jul 1971

Descriptors: exceptional child research; learning disabilities; neurologically handicapped; attention span; operant conditioning; positive reinforcement; behavior change; class management

Designed to determine if conditioning children to attend to tasks at hand would reduce negative attitudes and create more positive behavior patterns, 99 children participated in a 12-week behavior modification period. All had a specific learning disability or neurological deficits

and were in the age range 8-1 to 15-3. A child's attention to a given task for 15 minutes brought the positive reinforcement of a teacher's initial. A card of 48 initials was exchanged for a trinket or gift item. Eight weeks of reinforcing 15-minute attention spans were followed by 4 weeks of reinforcing 30-minute attention spans. A five-point Behavior Rating Scale served as criterion measures and was completed jointly by classroom teacher and principal. Inspection of the results when broken down by sex, race, intelligence, organicity and chronological age did not reveal any significant trends or differences with regard to attention span. Younger children did experience difficulty in maintaining the longer attention span. Operant conditioning of attention span did bring about more favorable teacher ratings of student behavior, but it did not have a positive effect on academic performance. (CB)

ABSTRACT 32983

EC 03 2983 ED N.A.
Publ. Date Jun 71 13p.

Campbell, Susan B. and Others
Cognitive Styles in Hyperactive Children and the Effect of Methylphenidate.
EDRS not available
Journal of Child Psychology and Psychiatry; V12 N1 P55-67 Jun 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; cognitive development; cognitive processes; drug therapy; academic achievement; behavior change

Cognitive problems of hyperactive children and effects of energizing drugs on their cognitive performance were studied. Data suggested that hyperactive children usually employed less efficient problem solving strategies than normal children, which may have explained their poor academic achievement. Hyperactive children whose behavior was modified by methylphenidate seemed to solve problems more efficiently and carefully; academic achievement, classroom behavior, and cognitive abilities may have improved due to increased attention, response organization, and impulse control. (CB)

ABSTRACT 32984

EC 03 2984 ED N.A.
Publ. Date 71 11p.
Cott, Allan

Orthomolecular Approach to the Treatment of Learning Disabilities.
EDRS not available
Schizophrenia; V3 N2 P95-105 Second Quarter 1971

Descriptors: exceptional child research; learning disabilities; emotionally disturbed; hyperactivity; drug therapy; nutrition; schizophrenia; medical treatment; orthomolecular therapy; megavitamin therapy

Orthomolecular therapy for learning disabled children is discussed. On the hypothesis that the hyperactive, learning disabled child may actually have a biochemi-

cal or neurological disorder, the author has treated 500 emotionally disturbed and learning disabled children from 1966 to 1971. His successful treatment of using megavitamin therapy to provide optimum molecular brain composition, especially optimum concentration of substances normally present in the human body, is briefly discussed. Main vitamins successfully used to control hyperactivity, ritualism, and seizures are niacin or niacinamide, ascorbic acid, pyridoxine, and calcium pantothenate. Advocating more studies relating advances in nutritional sciences to medicine, the author suggests that hyperactivity in the genetically predisposed child may be an early symptom of schizophrenia and may be made manifest by ingestion of cereal grains and their products. (CB)

ABSTRACT 32992

EC 03 2992 ED N.A.
Publ. Date 71 9p.

Seybold, Charles D.
The Value and Use of Music Activities in the Treatment of Speech Delayed Children.
EDRS not available
Journal of Music Therapy; V8 N3 P102-10 Fall 1971

Descriptors: exceptional child research; retarded speech development; learning disabilities; preschool children; language handicapped; speech therapy; music; motivation techniques; expressive language

Designed to assess both value and use of musical activities in treatment of speech delayed children, a speech therapy program with musical activities was conducted with four speech delayed, preschool male children for two weekly, 50-minute sessions over 8 weeks. Four matched controls received a regular program of speech therapy for speech delayed children. Experimental activities were devised to motivate spontaneous speech response by starting each activity with music, usually singing, and by following musical responses with related nonmusical activity. Test results of experimental and control groups were compared, finding that the experimental group results were significant at the .10 level. (CB)

ABSTRACT 33135

EC 03 3135 ED N.A.
Publ. Date Aug 71 11p.

Sykes, Donald H. and Others
Attention in Hyperactive Children and the Effect of Methylphenidate (Ritalin).
EDRS not available
Journal of Child Psychology and Psychiatry; V12 N2 P129-39 Aug 1971

Descriptors: exceptional child research; learning disabilities; hyperactivity; attention span; drug therapy; motor reactions; methylphenidate

The study examined the performance of 40 hyperactive children relative to that of 19 controls (matched for age, sex, and

IQ) on a task susceptible to momentary lapses of attention; examined the motor restlessness of both groups while seated during the attention task, using a stabilimetric cushion after the design of Sprague and Toppe (1966); and investigated the effect of methylphenidate (ritalin), a central nervous system stimulant, on attention in the hyperactive children. It was found that the maintenance of attention to an experimenter-paced task requiring the detection of significant stimuli was impaired in the hyperactive subjects; they detected fewer of the significant stimuli and made more incorrect responses to non-significant stimuli. Presence or absence of an auditory distractor had no effect on either group. Motor restlessness of the hyperactive children was significantly greater, and while restlessness increased during the second session for both groups, it increased at a faster rate for the hyperactive group. Hyperactive children treated with methylphenidate (ritalin) improved significantly in all areas of performance as compared to hyperactive children given a placebo. (KW)

ABSTRACT 33243

EC 03 3243 ED N.A.
Publ. Date Sep 71 8p.
Carter, John L.; Diaz, Angelo
Effect of Visual and Auditory Background on Reading Test Performance.

EDRS not available
Exceptional Children; V38 N1 P43-50
Sep 1971

Descriptors: exceptional child research; learning disabilities; minimally brain injured; environmental influences; performance factors; visual stimuli; auditory stimuli

Forty-two brain injured and 42 non brain injured sixth grade boys were administered reading achievement tests under three visual and three auditory distraction conditions. The results indicated that the overall performance was higher for the non brain injured group, and that increased amounts of visual and/or auditory distraction did not result in significantly lower scores for either group. It was concluded that many assumptions concerning stimulus control and teaching materials and methodology for brain injured children of this age group should be questioned. (Author)

ABSTRACT 33248

EC 03 3248 ED N.A.
Publ. Date 71 10p.
Silver, Larry B.
Familial Patterns in Children with Neurologically-Based Learning Disabilities.
EDRS not available
Journal of Learning Disabilities; V4 N7

P349-58 Aug-Sep 1971

Descriptors: exceptional child research; learning disabilities; etiology; heredity; neurologically handicapped; family characteristics

Five hundred fifty-six children with the neurological learning disability syndrome were studied. Data were collected on prenatal and perinatal difficulties, medical problems, and family history of similar learning disabilities (for mother, father, sibling or siblings). In the total study, 29.6% of the children had a positive family history of similar learning difficulties. The data from September 1967 to September 1969 were more complete and accurate. In this group, 39.4% of the children had such a positive family history. In each of the families with a positive history of learning disabilities the history suggestive of central nervous system stress was made less significant by the total family data. This stress was not a contributing factor in producing this syndrome. Even though there was a history of prenatal, perinatal, or postnatal difficulties, siblings without a history of such difficulties also had learning disabilities. This study strongly suggests that the etiologic factor with some of the children with this syndrome is an inherited central nervous system dysfunction rather than brain damage. (Author)

AUTHOR INDEX

- Ackerman, Peggy T and Others 31726.
 Alley, Gordon R and Others 32274.
 Amante, Dominic 31288.
 Ayres, A Jean 22437.
 Bar, Asner 31792.
 Beery, Keith E 10132.
 Berry-Luterman, Lillian 31792.
 Best, Helen and Others 10573.
 Bursuk, Laura Z 31505.
 Campbell, Susan B and Others 32983.
 Carman, Mary Ann and Others 31970.
 Carter, John L 21470, 33243.
 Chalfant, James C 22894.
 Clark, Margaret M 30836.
 Clemmens, Raymond 31653.
 Cott, Allan 32984.
 Cratty, Bryant J and Others 31219.
 Critchley, Macdonald 30355.
 Crowley, Harry L 31304.
 Cruickshank, William M and Others 21235.
 DeHirsch, Katrina and Others 20662.
 Delacato, Carl H 30453, 31658.
 Deutsch, Cynthia P 30520.
 Diaz, Angelo 33243.
 Diller, Leonard 31037.
 Dilling, H J 32222.
 Dykman, Roscoe and Others 30398.
 Edwards, R Philip and Others 31723.
 Ellis, Bessie 31311.
 Epstein, Lynn Chaikin and Others 30783.
 Ferinden, William E 30863.
 Ferinden, William E and Others 31966.
 Fernald, Grace M 30464.
 Francis-Williams, Jessie 32481.
 Gold, Lawrence 11979.
 Golden, Nancy E 11799.
 Guyer, Barbara P 32836.
 Haesslermann, Else 31543.
 Hayball, H L 32222.
 Hellmuth, Jerome, Ed 31993.
 Hicks, John 32376.
 Holloway, Gordon F 31967.
 Jacobson, Sherman 30863.
 Jones, Joyce 20694.
 Kasdon, Lawrence M 22069.
 Kaspar, Joseph C and Others 32534.
 Kenny, Thomas J 31653.
 Keogh, Barbara K 31496.
 Kephart, Newell C 31815.
 Klein, Isobel 21100.
 Lindsley, Donald B, Ed 31556.
 Lipton, Edward D 30534.
 Litchfield, Ticknor B 30430.
 Magaro, Peter A 30753.
 Marsh, Helen R 21100.
 McGrady, Harold J 10775.
 McLeod, John 20133.
 Meier, John H 31331.
 Michal-Smith, Harold and Others 21811.
 Mordock, John B 32017.
 Novaek, Harry S 21241.
 Olson, Don A 10775.
 Patterson, Natalie E, Comp 22189.
 Perry, Harold W 10179.
 Petersen, Sonya 30753.
 Pope, Lillie 30399.
 Rawson, Margaret B 10515.
 Salzinger, Kurt and Others 23302.
 Sapir, Selma 10761, 22217.
 Satz, Paul and Others 32235.
 Scheffelin, Margaret A 22894.
 Schulman, Jerome L 10296.
 Schumer, Florence 30520.
 Seybold, Charles D 32992.
 Silver, Larry B 33248.
 Smith, Carol E 31496.
 Sonstegard, Manford A 32233.
 Stavrianos, Bertha K 31755.
 Steiner, Sharon R 11799.
 Strauss, Alfred A 31815.
 Sykes, Donald H and Others 33135.
 Tarnopol, Lester, Ed 32722.
 Tseng, Meng-Shu 32233.
 Wagner, Rudolph F 32836.
 Weinberg, Joseph 31037.
 Wender, Paul H 32071.
 Wieder, Daniel 32376.
 Young, Francis A, Ed 31556.
 Zedler, Empress Y 11547, 30918.

SUBJECT INDEX

- Academic Ability 31496.
 Academic Achievement 10761, 11547, 21235, 21988, 22193, 22217, 22437, 30430, 31496, 31723, 32233, 32983.
 Achievement 10515.
 Adjustment (To Environment) 22193, 32534.
 Administration 21241.
 Admission Criteria 21241.
 Adolescents 31505.
 Age Differences 10775, 32233.
 Anomalies 31993.
 Arousal Patterns 31219.
 Attention Span 21470, 30398, 31037, 32233, 32836, 33135.
 Attitudes 32233.
 Auditory Perception 10761, 10775, 11799, 20133, 22894, 30520, 31967.
 Auditory Tests 10132.
 Aural Stimuli 21470, 33243.
 Average Students 10775.
 Behavior 10296, 21235.
 Behavior Change 23302, 30783, 32836, 32983.
 Behavior Patterns 10296, 20822, 22437, 32017.
 Behavior Problems 23302, 31653, 32017.
 Behavior Rating Scales 20822.
 Behavioral Sciences 10296.
 Bender Gestalt Test 10296, 31496.
 Biological Influences 31288.
 Case Studies (Education) 21235, 30464.
 Cerebral Palsy 32376.
 Child Development 31993, 32376.
 Childhood 30863.
 Class Management 32836.
 Classroom Environment 21235.
 Classroom Screening Instrument 20822.
 Clinical Diagnosis 10296, 11799, 20822, 30355, 30464, 30614, 32071.
 Clinics 21241.
 Cognitive Development 31556, 32983.
 Cognitive Processes 31219, 31815, 32983.
 College Admission 31970.
 Colleges 31970.
 Comparative Analysis 11547.
 Concept Formation 30520.
 Conditioned Response 30398.
 Conference Reports 30614, 31556.
 Counseling Effectiveness 32376.
 Demonstration Projects 10761, 21235, 21452.
 Developmental Test of Visual Motor Integration 10132.
 Dextroamphetamine 30783.
 Diagnostic Tests 10296, 21235, 31653, 31792.
 Directories 31970.
 Disadvantaged Groups 31288.
 Discrimination Learning 10761.
 Doman Delacato Method 30453.
 Draw A Person Test 10296.
 Drug Therapy 11547, 30783, 30918, 32071, 32722, 32983-32984, 33135.
 Dyslexia 10515, 11799, 11979, 20133, 20662, 20694, 21811, 22069, 22189, 30355, 30836, 32235.
 Educational Diagnosis 10296, 21988, 32481.
 Educational Opportunities 31970.
 Educational Planning 30918.
 Electroencephalography 21988, 31653.
 Elementary School Students 22437, 31331, 31496.
 Embedded Figures Test 30753.
 Emotional Adjustment 21452, 32376.
 Emotional Problems 22189, 32233.
 Emotionally Disturbed 21235, 32984.
 Environmental Influences 33243.
 Etiology 30355, 30464, 32071, 32235, 33248.
 Evaluation Criteria 21988.
 Evaluation Methods 20822.
 Exceptional Child Education 11979.
 Exceptional Child Research 10132, 10179, 10296, 10515, 10573, 10761, 10775, 11547, 11799, 20133, 20662, 20694, 20822, 21100, 21235, 21241, 21452, 21470, 21811, 21988, 22069, 22189, 22193, 22217, 22437, 22894, 23302, 30355, 30398-30399, 30430, 30453, 30464, 30520, 30534, 30614, 30753, 30783, 30836, 30863, 30918.

- 31037, 31219, 31288, 31304, 31331, 31496, 31505, 31543, 31556, 31653, 31658, 31723, 31726, 31755, 31792, 31815, 31966-31967, 31970, 31993, 32017, 32071, 32222, 32233, 32235, 32274, 32376, 32481, 32534, 32722, 32836, 32983-32984, 32992, 33135, 33243, 33248.
- Expressive Language 10761, 32992.
 Eye Hand Coordination 30430.
 Failure Factors 30464.
 Family Background 21811, 22193.
 Family Characteristics 23302, 33248.
 Family Counseling 21452.
 Family Influence 21811.
 Family (Sociological Unit) 10515.
 Field Dependence 30753.
 Followup Studies 10515, 20662, 31496.
 Genetics 21811.
 Gifted 10515, 31496.
 Group Instruction 21241.
 Health 22193.
 Heredity 10515, 21811, 33248.
 Hyperactivity 30398-30399, 30783, 32071, 32534, 32983-32984, 33135.
 Identification 10132, 10296, 10515, 11799, 11979, 20662, 20822, 22189, 22193, 30753, 30863, 31304, 31496, 31755, 32233, 32481.
 Illinois Test of Psycholinguistic Abilities 10132.
 Incidence 20822, 31331.
 Individual Characteristics 20822, 21811.
 Individualized Instruction 11547, 11979, 20694, 31331.
 Infancy 31556, 31993.
 Infant Behavior 31993.
 Information Processing 22894.
 Instructional Materials 21235, 22189.
 Intelligence 10515, 22217.
 Intelligence Differences 11547.
 Intelligence Level 31726.
 Intelligence Tests 31543, 31726.
 Interdisciplinary Approach 11979, 22069.
 Interpersonal Competence 32222.
 Intervention 22189, 22193, 32376.
 Johnson Test of Motor Skill Development 10573.
 Kindergarten Children 30863.
 Language Ability 10761, 11979, 22217, 31792.
 Language Arts 22189.
 Language Development 10761, 22193, 22894.
 Language Handicapped 11547, 30918, 31792, 32992.
 Language Instruction 11547.
 Language Tests 10132, 31792.
 Lateral Dominance 30520.
 Learning Characteristics 11547.
 Learning Difficulties 22069, 22193, 31496, 32233.
 Learning Processes 22894, 30398.
 Learning Readiness. Use Readiness (Mental).
 Learning Theories 31993.
 Longitudinal Studies 10132, 32233.
 Low Achievers 21241.
 Males 30399.
 Mathematics 30464.
 Maturation 20662, 32235.
 Medical Evaluation 20822, 21988, 31653, 31993, 32722.
 Medical Research 22894, 30783.
 Medical Treatment 30783, 32071, 32722, 32984.
 Megavitamin Therapy 32984.
 Memory 22894.
 Mentally Handicapped 21235, 21241, 31219.
 Methylphenidate 33135.
 Minimally Brain Injured 10179, 10296, 10573, 11547, 20662, 21235, 21241, 21470, 21988, 22189, 22217, 30399, 30520, 31037, 31653, 31815, 32017, 32071, 32274, 32534, 33243.
 Mother Attitudes 31993.
 Motivation Techniques 32992.
 Motor Development 10573, 22189, 30430, 30534, 30614, 31993.
 Motor Reactions 30399, 33135.
 Movement Education 31219.
 Multiply Handicapped 21235.
 Music 32992.
 Neurological Defects 22437, 22894, 30453, 30918, 31653, 31658, 31815, 32071, 32722.
 Neurologically Handicapped 21988, 23302, 30520, 30614, 30783, 31037, 31288, 31543, 31658, 31723, 32376, 32534, 32836, 33248.
 Neurology 30355, 30453, 30614, 31556, 31653, 31993.
 Nonprofessional Personnel 20694.
 Nutrition 32984.
 Operant Conditioning 23302, 32836.
 Ophthalmology 21988.
 Orthomolecular Therapy 32984.
 Parent Attitudes 21452, 22069, 32233, 32376.
 Parent Counseling 21452, 32376.
 Parent Education 23302.
 Parent Role 23302.
 Perception 10179, 10761, 10775, 30355, 30520, 31967.
 Perception Tests 21100, 30520.
 Perceptual Development 10761, 21100, 22217, 30430, 31966.
 Perceptual Motor Coordination 10515, 10573, 20662, 22217, 22437, 30430, 31967.
 Perceptual Motor Learning 10573, 10761, 22193, 22437, 30520, 30534, 31219, 31966.
 Perceptually Handicapped 10179, 30430, 30753, 31556.
 Performance Factors 33243.
 Physical Activities 10573.
 Physical Education 10573.
 Physical Therapy 30614.
 Physiology 30614.
 Positive Reinforcement 32836.
 Prediction 10132, 20662, 31496.
 Predictive Measurement 10132, 10775, 20662, 30863, 31304, 31496.
 Predictive Validity 30863, 31304, 31723.
 Premature Infants 20662, 31993.
 Prenatal Influences 31993.
 Preschool Children 10132, 20662, 22193, 32481, 32992.
 Preschool Evaluation 20662, 31543, 32233, 32481.
 Prevention 10132, 31288.
 Primary Grades 10761, 30531, 31331.
 Professional Education 22193.
 Professional Personnel 10515, 21241.
 Prognostic Tests 10132.
 Program Budgeting 21452.
 Program Descriptions 31966.
 Program Evaluation 10179, 11979, 21452, 32376.
 Program Planning 11979, 21241, 22193, 30918.
 Projective Tests 31755.
 Psychoeducational Processes 10775, 21988, 31331.
 Psycholinguistic 10132, 20133, 22217, 31967.
 Psychological Characteristics 10296, 21235, 31755, 32017, 32071.
 Psychological Evaluation 31653, 32722.
 Psychological Tests 10132, 10296, 20822.
 Psychomotor Skills 10573, 30399, 30430.
 Psychopathology 31815, 31993.
 Questionnaires 31970, 32222.
 Rating Scales 20822.
 Reaction Time 30398.
 Readiness (Mental) 10515, 22193.
 Reading 20133, 20662, 20694, 21100, 30430, 30453.
 Reading Ability 10515, 20662, 20694, 21100.
 Reading Clinics 11979.
 Reading Comprehension 21470, 31505.
 Reading Diagnosis 21100, 30453, 31755.
 Reading Difficulty 11799, 11979, 20662, 22069, 22189, 30355, 30453, 30464, 30753, 30836, 31304, 31505, 31556, 31658, 31755, 32235.
 Reading Readiness 20662, 30534, 30836.
 Reading Reinforced Method 31304.
 Reading Skills 22069, 30753.
 Reading Tests 21470, 30753, 31304.
 Referral 22189.
 Regular Class Placement 11547, 30918, 32222.
 Rehabilitation 31037.
 Remedial Instruction 30464, 31505.
 Remedial Programs 11979, 20694, 21241, 22189, 30453, 30836, 31966.
 Remedial Reading 11979, 21100, 22189, 30464, 31304.
 Research Needs 22894.
 Research Projects 31658.
 Research Reviews (Publications) 22894, 31037, 32017.
 Resource Teachers 22189, 22193.
 Response Mode 10775.
 Retarded Speech Development 31967, 32992.
 Schizophrenia 32984.
 School Community Relationship 30836.
 Screening Tests 10132, 10761, 20822, 21988, 22193, 31496.
 Self Concept 32233.
 Senior High School Students 30753.
 Sensory Integration 10761, 10775, 22894, 30520, 31505.
 Sensory Training 22217, 22437.
 Sentence Structure 31792.
 Sequential Learning 31331.
 Sex Differences 22217.
 Siblings 21811.
 Skill Development 10573.
 Social Adjustment 21452, 32222, 32233.
 Social Psychology 31288.
 Socioeconomic Influences 31288, 32274.
 Socioeconomic Status 32274.
 Special Classes 10179, 10573, 11547.
 Speech Skills 20133.
 Speech Therapy 32992.
 Spelling 10515, 20662, 30464.
 Staff Role 21452.
 Stanford Binet Intelligence Scale 10296.
 State Surveys 31331.
 Statistical Data 21988.
 Student Adjustment 21452.
 Student Evaluation 11547, 21988, 22193,

22217, 31496, 32222.
Summer Programs 21452.
Summer Schools 21452.
Supplementary Educational Centers
11979.
Symbolic Learning 22894.
Tactual Perception 22894, 30520.
Task Performance 10132, 21470.
Teacher Education 21452.
Teacher Role 30836, 30863.
Teaching Methods 10179, 10761, 11979,
21235, 21241, 22189, 22217, 30464,
31505.
Test Construction 10296, 31543.

Test Interpretation 21988.
Test Reliability 20822.
Test Validity 31304.
Testing 10132, 10179, 10296, 10573,
10775, 11799, 20662, 20694, 20822,
21988, 31543.
Theories 31288, 31658, 31815, 32071,
32235.
Monitoring 11547, 11979, 21241.
Underachievers 10515, 11547.
Urban Environment 31288.
Verbal Ability 20133.
Verbal Tests 10775.
Vision 31556.

Visual Learning 31556.
Visual Perception 10761, 10775, 11799,
20133, 21100, 21470, 22894, 30520,
30534, 30753, 31556, 31967.
Visual Stimuli 21470, 31556, 33243.
Visually Handicapped 30430.
Vocational Followup 10515.
Wechsler Intelligence Scale for Children
10296, 31726.
Word Recognition 21100.
Writing 20662.
Written Language 22894.

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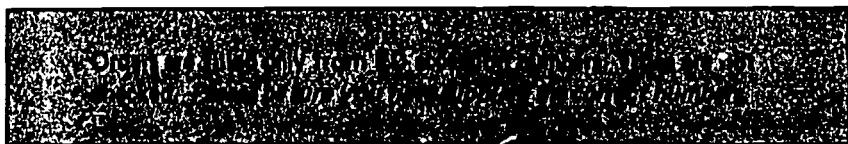
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