

DOCUMENT RESUME

ED 054 572

EC 033 221

TITLE

Cerebral Palsy: Exceptional Child Bibliography Series.

INSTITUTION

Council for Exceptional Children, Arlington, Va. Information Center on Exceptional Children.

SPONS AGENCY

Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.

PUB DATE

Feb 71

NOTE

21p.

EDRS PRICE

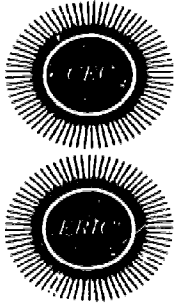
MF-\$0.65 HC-\$3.29

DESCRIPTORS

*Annotated Bibliographies; *Bibliographies; *Cerebral Palsy; *Exceptional Child Education; Research Projects

ABSTRACT

Eighty-one references selected from Exceptional Child Education Abstracts are included in the annotated bibliography on cerebral palsy, one in a series of over 50 similar listings dealing with handicapped and gifted children. For each listing, bibliographic and availability information, indexing and retrieval descriptors, and an abstract are included. The research reports, texts, journal articles, and other literature listed cover such aspects of cerebral palsy as agency role, associated handicaps, child development, clinical diagnosis, educational needs and programs, etiology, services available, language development, medical treatment, physical and speech therapy, and others. Both an author and a subject index are provided. (KW)



CEREBRAL PALSY

February 1971

U.S. DEPARTMENT OF HEALTH, EDUCATION
& WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED
EXACTLY AS RECEIVED FROM THE PERSON OR
ORGANIZATION ORIGINATING IT. POINTS OF
VIEW OR OPINIONS STATED DO NOT NECES-
SARILY REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

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

This bibliography is a product of the Information Processing
Unit, CEC-ERIC Information Center on Exceptional Children.

The work presented or reported herein was performed pursuant to a grant from the Bureau of
Education for the Handicapped, US Office of Education, Department of Health, Education, and
Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy
of the US Office of Education and no official endorsement by the US Office of Education should
be inferred.

2 1

The CEC Information Center on Exceptional Children

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 Instructional Materials Centers Network for Handicapped Children and Youth (IMCNHCY). 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.

How to Use This Bibliography

The abstracts in this bibliography have been retrieved from the computer stored information of the CEC Information Center on Exceptional Children. Abstracts represent the Center's complete holdings on the topic as of the date indicated.

How to Read the Abstract

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.

How to Use the Indexes

Some bibliographies in *Exceptional Children Bibliography Series* contain author and/or subject indexes. In these bibliographies, readers seeking work on a specific aspect of the general topic may consult the subject index to be referred to specific abstract numbers. Abstracts dealing with several topics may be identified by finding the same abstract number under two or more subjects in the subject index.

How to Purchase Documents

For documents available from their publishers, information on price and address is included in the abstract.

Many documents may be purchased in microfiche (a 4" x 6" microfilm card containing up to 70 pages of information) and/or hard copy (readable size photo reproduced pages) reproduction from the ERIC Document Reproduction Service. For example, "EDRS mf" indicates the document may be purchased in microfiche reproduction and "EDRS mf, hc" indicates the document may be purchased in both microfiche and hard copy reproduction.

To determine purchase price for hard copy multiply the document's number of pages by \$.05, then add \$.10. To determine purchase price for microfiche, use the table below. For example a 44 page document in hard copy would cost \$2.30 (44 x \$.05 + \$.10) and in microfiche would cost \$.25.

To order document reproductions, provide the ED number of the desired document, the number of copies being ordered, and the type of reproduction desired (microfiche or hard copy). Payment must accompany orders totaling less than \$5. Add a special handling charge of \$.50 to all orders. The ERIC Document Reproduction Service is registered to collect sales taxes. Orders from states which have sales tax laws should include payment of the appropriate tax or tax exemption certificate. A 25 percent service charge, calculated to the nearest cent, must accompany orders from outside the United States, its territories, and possessions.

Orders should be sent to:

ERIC Document Reproduction Service
National Cash Register Company
4936 Fairmont Avenue
Bethesda, Maryland 20014

No. of Pages	Cost of Microfiche	No. of Pages	Cost of Microfiche
1 - 57	\$.25	548 - 617	\$2.25
58 - 127	.50	618 - 687	2.50
128 - 197	.75	688 - 757	2.75
198 - 267	1.00	758 - 827	3.00
268 - 337	1.25	828 - 897	3.25
338 - 407	1.50	898 - 967	3.50
408 - 477	1.75	968 - 1037	3.75
478 - 547	2.00		

ABSTRACTS

ABSTRACT 10005

EC 01 0005 ED 010 716
 Publ. Date 66 63p.
Teaching Aids for Children with Cerebral Palsy.
 Univ. Of The State Of New York,
 Albany. Bur. For Ph. Han.
 EDRS mf,hc

Descriptors: exceptional child education; physically handicapped; instructional materials; perception; perceptual development; verbal development; instructional aids; cerebral palsy; concept formation; educational equipment; sensory training; number concepts; physical facilities; New York

Many children with cerebral palsy have various perceptual handicaps which result from neurological impairment. Teaching aids are described by (1) name, (2) materials needed in construction, (3) pictorial representation, (4) explanation of use, and (5) the contributor's name. Categories of aids include (1) sensory development, (2) verbal development, (3) number development, and (4) physical equipment and facilities. Additional sources are listed. (GB)

ABSTRACT 10058

EC 01 0058 ED 014 821
 Publ. Date 28Feb 66 31p.
 Mc Cann, Cairbre
Development and Evaluation of Adaptive Communication Devices for the Severely Handicapped Child.
 Crooked Mt. Found., Greenfield, New Hampshire
 EDRS mf,hc

Descriptors: exceptional child research; physically handicapped; communication (thought transfer); cerebral palsy; communication problems; electromechanical aids; adolescents; adults; children

A sample of 13 severely involved, cerebral palsied clients (12 children, one adult) participated in this study. Degree of neuromotor disability was determined by a scale based on activities of daily living. A psychological evaluation was made of all subjects in the study. Subjects were evaluated in their use of electronic switches connected to various output devices ranging in complexity from a simple series of lights to a specially modified electric typewriter. Successful use of these devices has implications for recreation, education, communication, and therapy. Switch controls that were developed included a joystick, a set of mercury switches mounted on a hat, a miniature joystick held between the teeth and operated by the tongue, a pneumatic control hemispherical joystick for a palmar surface control, several magnetically activated devices, and a horn button switch. Output devices included a display board with four lightbulbs, Etch-a-Sketch drawing toy strip projector and electric typewriter control device. Subjects were

evaluated on time lapse between request for response and response and adequacy of response. The appendixes include activities of daily living evaluation form, information on subjects tested and photographs of the input and output devices tested. (GB)

ABSTRACT 10097

EC 01 0097 ED 012 532
 Publ. Date 25 Apr 66
 Cruickshank, William M.
Cerebral Palsy, Its Individual and Community Problems.
 EDRS not available

Descriptors: exceptional child education; physically handicapped; multiply handicapped; cerebral palsy; intelligence tests; speech handicaps; personality; language handicaps; aurally handicapped; visually handicapped; physical therapy; occupational therapy; mental retardation; parent education; vocational counseling; parent counseling; vocational rehabilitation; employment; community planning; social work; medical services; clinical diagnosis; parent attitudes; community attitudes; Bender Visual Motor Gestalt Test

In this revised edition, illustrated with 98 figures and tables, some original chapters have been expanded and new chapters have been added. Contributing authors are listed, and include educators, clinical workers, and administrators in the field of cerebral palsy. References and notes conclude each chapter, and several chapters have sections on related reading. A general index and author index follow the text. Chapters are listed under general area headings of (1) diagnosis and assessment (scope of the problem, medical aspects, intelligence evaluation, personality characteristics), (2) avenues to communication (speech and language problems, hearing problems, visual disorders), (3) therapy and education (physical therapy, occupational therapy, educational planning, mental retardation), and (4) planning for life adjustment (parent counseling and education, social casework, vocational guidance, employment, total community planning for individuals with cerebral palsy). The book is intended for students, professional workers, and others interested in the problems of cerebral palsy. This document is available from the Syracuse University Press, Box 87, University Station, Syracuse, New York 13210 for \$10.95. (JD)

ABSTRACT 10115

EC 01 0115 ED 015 573
 Publ. Date 64
 McDonald, Eugene T.;
Cerebral Palsy, Foundations of Speech Pathology Series.
 EDRS not available

Descriptors: exceptional child education; identification; speech therapy;

physically handicapped physical therapy; speech handicapped; cerebral palsy; language development; children; etiology; medical evaluation; multiply handicapped; neurologically handicapped; neurology; speech; speech evaluation; speech instruction; classification

This introductory text on cerebral palsy is divided into two sections. The first section of the book contains information about understanding the meaning of cerebral palsy, programs for those with cerebral palsy, the neurological bases, etiology, diagnosis, and the classification of cerebral palsy. Problems often associated with cerebral palsy are briefly discussed as are the types of therapy employed in treatment. The last two chapters are concerned with diagnosis and treatment of language and speech problems. Each of the chapters has a series of suggested readings and questions about the topic. A 195-item bibliography is included. This document is available from Prentice-Hall, Inc., Englewood Cliffs, New Jersey, and is available for \$4.95. (GP)

ABSTRACT 10354

EC 01 0354 ED 014 834
 Publ. Date Dec 66 22p.
 Robinault, Isabel P., Comp.
Audio Visual Materials.
 United Cerebral Palsy Asn., New York, New York
 EDRS mf,hc

Descriptors: exceptional child education; audiovisual instruction; physically handicapped; vocational rehabilitation; cerebral palsy; films; filmstrips; annotated bibliographies; catalogs; instructional materials; medical evaluation; recreation; management; activities

One hundred twenty-seven films and filmstrips related to the diagnosis and habilitation of cerebral palsied persons with varying ages, needs, and circumstances are listed in this publication. The titles are listed alphabetically in sections--basic sciences and basic information, activities of daily living, medical aspects and therapeutic management, evaluation and psychosocial aspects, recreation, and vocational information. Information includes year, running time, color and sound information, rental fee, source from which available, and an annotation. The type of audience (lay or professional) is designated. (JA)

ABSTRACT 10373

EC 01 0373 ED 314 181
 Publ. Date 64 69p.
A Selective Bibliography on Brain-Damaged Children.
 Woods Sch. For Exceptional Children,
 Langhorne, Pa.
 EDRS mf,hc

Descriptors: exceptional child education; learning disabilities; minimally

brain injured; annotated bibliographies; adolescents; behavior; cerebral palsy; children; clinical diagnosis; diagnostic tests; etiology; eurologically handicapped; medical treatment; individual characteristics; theories; educational principles

Ranging in date from 1924 to 1963, this selective bibliography includes 317 annotated references dealing directly with the behavioral characteristics of children with cerebral dysfunction. References have appeared in journals or other sources available in university libraries. The bibliography is classified into six major divisions--(1) the entity and its description, (2) clinical and special diagnosis, (3) characteristic mechanisms and natural history, (4) etiology (clinical, experimental, and epidemiological), (5) treatment, education, and management, and (6) reviews, overviews, and theories. In each division references have been listed alphabetically by author. This document is an excerpt from *Brain-Damage in Children--The Biological and Social Aspects*, edited by Herbert G. Birch, reprinted with permission of the Association for Aid of Crippled Children. (JA)

ABSTRACT 10412

EC 01 0412 ED 013 519
Publ. Date 66
Mecham, Merlin J. And Others
Communication Training in Childhood Brain Damage.
EDRS not available

Descriptors: exceptional child education; language; communication (thought transfer); learning disabilities; physically handicapped; minimally brain injured; cerebral palsy; speech instruction; language instruction; psychological evaluation; neurologically handicapped; curriculum; preschool programs; children; speech evaluation; speech therapy; behavior; language development; educational therapy; psychological characteristics; perceptual handicaps; learning difficulties; speech handicaps; auditory training; teaching techniques

Intended as a text source book, or practical reference, the book discusses speech and hearing problems, psychological and linguistic implications, and special education for cerebral palsied and brain damaged children. Number and complexity of speech and hearing problems are emphasized, i. e., neuromuscular involvement, articulation, rhythm, voice and breathing, discrimination, hearing acuity, auditory linguistics, and symbolic problems. Methods of evaluating speech and hearing of brain damaged children are discussed, and the team approach is recommended for gathering psychological, social, and educational information. According to the authors, in shaping speech, hearing, and language behavior, the therapist strives for personal social communication, putting language into life situations. The therapy follows a developmental schedule geared to the child's level. Receptive and expressive language relates to mean-

ingful experiences, rather than sound drills. In summarizing the psychological and linguistic implications of childhood brain damage, the authors list behavioral characteristics and methods of psychological evaluation, and briefly treat emotional factors. Curriculum, grouping, and methods of reporting progress for the preschool level are discussed. General learning problems and problems related to specific educational subject areas, such as reading and arithmetic, are discussed along with suggestions for appropriate teaching techniques. A reference list contains 421 items. This document was published by Charles C Thomas, Publisher, Springfield, Illinois, and is available for \$11.75. (JB)

ABSTRACT 10419

EC 01 0419 ED 014 840
Publ. Date 13 Mar 65 67p.
Adams, Forrest H. And Others
Selected Papers from Professional Program Segments of United Cerebral Palsy's Annual Conference (15th Los Angeles, California, March 11-13, 1965).
United Cerebral Palsy Association, New York, New York
EDRS mf,hc

Descriptors: exceptional child education; vocational rehabilitation; physically handicapped; cerebral palsy; conference reports; diagnostic tests; employment opportunities; evaluation; handicapped; language handicaps; learning difficulties; minimally brain injured; perceptual motor coordination; research needs; state agencies; teacher role; Illinois Test of Psycholinguistic Abilities; ITPA

Papers selected from the United Cerebral Palsy Association's 15th annual conference, March 13, 1965, papers are (1) *S Is to Turn* by Paul V. Carlson, (2) *Certain Aspects of the Functional Status of the Fetus in Utero* by Forrest H. Adams, (3) *Encephalitis--Common Causes and After Effects* by John M. Adams, (4) *Brain Research at the Barrow Neurological Institute, A Non-University Center* by Eduardo Eidelberg, (5) *Education for Self-Sufficiency* (abstract) by Edgar A. Doll, (6) *An Approach to the Assessment of Language Disorders in Brain Damage* by Otfried Spreen, (7) *The Teacher's Contribution in the Diagnosis and Remediation of Learning Disabilities* by Douglas E. Wiseman, (8) *Development of Creative Designs by Handicapped Clients in Competitive Retailing* by Sylvia P. Howard, (9) *Future Direction for Research in Vocational Rehabilitation* by Charles S. Nicholas, (10) *Implications of Developing State Divisions of Vocational Rehabilitation Services for Cerebral Palsied Clients* by Donald W. Blyth. Comments and discussion are provided by Sidney Carter, Bluma Weiner, Samuel Ashcroft, Martin E. McCavitt, Isador W. Scherer, Craig Mills, and Don Burton. (MY)

ABSTRACT 10424

EC 01 0424 ED 015 610
Publ. Date 67

Hatton, Daniel A.
Understanding Cerebral Palsy, a Handbook for Parents.
Erie County Crippled Children's Society, Pa.
EDRS not available

Descriptors: exceptional child education; physically handicapped; family (sociological unit); parents; cerebral palsy; parent role; parent attitudes; children; discipline; intellectual development

Written by a psychologist, this manual provides basic information about the nature of cerebral palsy and discusses feelings and reactions of parents of cerebral palsied children. Information about the brain and brain damage in relation to motor and emotional function, perception, and intelligence is presented. Attention is given to problems arising in the family's acceptance of diagnosis and attendant feelings of guilt. There is also discussion of discipline, education, and the question of institutional care for the cerebral palsied child. An appendix defines related terms. This document was published by the Erie County Crippled Children's Society, 101 East Sixth Street, Erie, Pennsylvania 16501. (SB)

ABSTRACT 10565

EC 01 0565 ED 021 374
Publ. Date 67 115p.
Services for Children with Cerebral Palsy; A Guide for Public Health Personnel.
American Public Health Association, Inc., New York, New York, Program Area Committee On Child Health Association For The Aid Of Crippled Children, New York, New York; New York Fund For Children, New York
EDRS not available
N5503A64
American Public Health Association, Inc., 1740 Broadway, New York, New York 10019 (\$3.00).

Descriptors: exceptional child services; physically handicapped; identification; program planning; incidence; clinical diagnosis; cerebral palsy; medical treatment; etiology; preventive medicine; medical evaluation; educational diagnosis; vocational education; community services; institutions; hospitals; homebound; medical services; clinics

Directed to persons in voluntary or official agencies and to planning groups whose decisions determine or affect the extent, coverage, content, and operation of community services to children who are handicapped by cerebral palsy, this guide has as its objectives to present background information on cerebral palsy as it affects the individual children, their families, and communities, to suggest policies, goals and methods of approach to the problem of cerebral palsy on both an individual and a community basis, and to outline practical ways of organizing services and community resources for the cerebral palsied. Basic concepts and facts about cerebral palsy, causes and preventions of the disease,

casefinding, diagnosis, program planning, and methods of treatment and guidance are described. Special services and facilities at the community level and the organization of community resources are discussed. The need for program study and evaluation and the role of research are presented. The appendixes outline etiologic, medical, and educational classification of children with cerebral palsy, examine qualifications for professional personnel, and include an example of procedure in a diagnostic clinic session for children with cerebral palsy. (MC)

ABSTRACT 10588

EC 01 0588 ED 023 219
41p.

Alpha Chi Omega Toy Book.

Alpha Chi Omega Fraternity, Indianapolis, Indiana
EDRS mf,hc
Alpha Chi Omega National Headquarters, 3445 Washington Boulevard, Indianapolis, Indiana 46205.

Descriptors: exceptional child education; physically handicapped; self care skills; instructional materials; manipulative materials; cerebral palsy; children; toys; psychomotor skills; perceptual motor coordination; skill development; games; handicapped

Patterns and directions are given for making self-help toys for cerebral palsied and other handicapped children. The toys are designed to entertain and to develop muscle coordination and finger-elbow dexterity, teach self-help skills such as dressing, stimulate visual perception, encourage hand grasps and eye-hand coordination, motivate speech, and give dramatic play. Illustrations and directions are given for the construction of 38 toys; 10 additional toys and 11 kits for play activities are also suggested. (DF)

ABSTRACT 10721

EC 01 0721 ED N.A.
Publ. Date Dec 67 3p.

Best, Gary A.

Cerebral Palsy: A Taxonomy of Related Problems.

Minnesota University, Minneapolis, Department Of Special Education
EDRS not available
Cerebral Palsy Journal; V28 N6 P8-10
Nov-dec 1967

Descriptors: exceptional child education; physically handicapped; cerebral palsy; taxonomy; individual needs; special services; agencies; financial support

A taxonomy that gives form and structure to what is known about those with cerebral palsy is presented, and its advantages are described. Limited to factors beyond the neurological and physiological determinants and characteristics of cerebral palsy, the taxonomy elaborates on four dimensions: the needs of the cerebral palsied, services to meet these needs, agencies which can provide these services, and aid for financing services and agencies. An illustrative manipulation of some of the factors of

each dimension is given to show the taxonomy's use for further study and exploration of problems of the cerebral palsied. (SN)

ABSTRACT 10726

EC 01 0726 ED N.A.
Publ. Date 65 34p.

Summary of Progress in Childhood Disorders of the Brain and Nervous System; Research Profile Series, Number 11.

National Institute Of Neurological Diseases And Blindness, Bethesda, Maryland

EDRS not available

PHS-PUB-1370

Superintendent Of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (\$0.20).

Report Included In Annual Statement Made To The Congress Of The United States By The Director Of The National Institute Of Neurological Diseases And Blindness.

Descriptors: exceptional child research; mental; handicapped; infancy; neurologically handicapped; prenatal influences; medical research; pregnancy; medical evaluation; premature infants; medical treatment; cerebral palsy; etiology; identification; clinical diagnosis; cooperative programs; infectious diseases; mothers; followup studies; biochemistry; minimally brain injured; child development

The purpose, scope, and methods of the Collaborative Perinatal Research Project are summarized; and findings are given relating to pregnancy, birth problems, prematurity, and condition of the mother. A discussion of cerebral palsy defines the condition, and discusses causation and cerebral palsy research by the National Institute of Neurological Diseases and Blindness. Research approaches for discovering effects of damaging influences before, during, and after birth upon structure, organization, and mode of action of the central nervous system affecting mental development are presented. Research findings are considered in areas of genetics, perinatal factors, radiation damage, congenital malformations in animals, biochemistry, vein pressure, circulation, central nervous system damage, and brain growth. The following are also described: techniques in screening and diagnosis of infants; therapeutic and preventive measures; effects of other programs; basic studies of neurological and sensory system; and program developments. (JM)

ABSTRACT 10780

EC 01 0780 ED 025 060
Publ. Date Jun 68 114p.

Mysak, Edward D.

Neuroevolutional Approach to Cerebral Palsy and Speech.

EDRS not available

The Teachers College Press, Columbia University, 525 West 120th Street, New York, New York 10027 (\$3.95).

Descriptors: exceptional child education; physically handicapped; speech

handicapped; behavior; speech therapy; behavior theories; cerebral palsy; neurological organization; neurologically handicapped; neurology; physical development; physiology; pathology; evolution; cerebral dominance; oral communication; child development; physical therapy; perceptual motor learning

Intended for cerebral palsy specialists, the book emphasizes the contribution that a neuroevolutional approach to therapy can make to habilitation goals of the child with cerebral palsy and applies the basic principles of the Bobath approach to therapy. The first section discusses cerebral palsy as a reflection of disturbed neuro-ontogenesis and traces human neuroevolution from the supine to bipedal stages. Also presented are the rationale for neurotherapy, neurophysiological considerations in developing therapy procedures, three general types of neurotherapy and requirements for developing therapy programs, and results (with case studies) of a two-part study of actual application of neurotherapy. The second section considers the neuroevolution of speech, including bipedal evolution and speech, oroneuro-motor evolution and speech, corticalization, dominance, and speech, and theories on the evolution of oral communication. The respiratory-phonatory-articulatory complex of the cerebral palsied is identified, and principles of a speech habilitation program are presented. Each chapter contains a reference list. (JB)

ABSTRACT 10814

EC 01 0814 ED 025 882
Publ. Date 67 93p.

Oswin, Maureen

Behaviour Problems amongst Children with Cerebral Palsy.

EDRS not available

The William And Wilkins Company, 428 Preston Street, Baltimore, Maryland 21202 (\$4.85).

Descriptors: exceptional child education; physically handicapped; behavior; environmental influences; family (sociological unit); cerebral palsy; behavior problems; child development; self concept; family problems; family influence; education; attitudes; teaching methods; case records; learning difficulties; research reviews (publications); hospitalized children; adjustment (to environment)

Based on 6 years of work with cerebral palsied children, the thesis considers types and causes of cerebral palsy, the life pattern of the child with cerebral palsy from early years to adolescence, and the effect of the handicapped child on his parents and family. Literature on behavior disorders is reviewed, and kinds of behavior problems are described. Causes of behavior problems considered are the handicap of cerebral palsy itself and the environment and home; some solutions are suggested for the cerebral palsied child in school. Case histories are cited. (LE)

ABSTRACT 10874

EC 01 0874 ED 013 505
 Publ. Date 65
 Cruickshank, William M.
Perception and Cerebral Palsy, Studies in Figure-Background Relationship. Syracuse University Special Education and Rehabilitation Monograph 2.
 EDRS not available
 Syracuse University Press, Box 87, University Station, Syracuse, New York 13210 (\$6.00).

Descriptors: exceptional child research; physically handicapped; tests; perception; cerebral palsy; perception tests; children; visual perception; adolescents; tactual perception; neurologically handicapped; perceptually handicapped; test results; Syracuse Visual Figure Background Test; Binet Vocabulary Test; Tactual Motor Test; Marble Board Test; Fly Test; SVFB; Terman Merrill Intelligence Scale

A study of perception used a sample of 325 cerebral palsied children (211 were spastic, 114 were athetoid) and 110 normal children. All children were between 6 and 16 years of age and of normal intelligence. To investigate perceptual disturbances, six tests were administered: the Tactual Motor Test, the Syracuse Visual Figure Background Test (SVFB), the Marble Board Test, a maze test, and two disc tests designed to measure tactual perception of geometric shapes. The Binet Vocabulary Test was used as a screening test and to establish rapport. Data were analyzed by comparing the three groups of subjects on each measure and determining relationships to chronological age and sex. Interrelationships among the perceptual measures were computed. Cerebral palsied subjects performed more poorly on the SVFB, the Marble Board, the Tactual Motor, and maze tests than did the normal subjects. Disc tests were easily performed by all subjects. Spastic subjects performed more poorly than athetoid subjects on the Marble Board and the SVFB Tests. All tests showed developmental trends and the effect of age was most pronounced for the Tactual Motor, Marble Board, and maze tests, and lower for the SVFB test. Generally, relationships between tests were low (except for Marble Board and Tactual Motor tests for the spastic group). In an additional study, the Lerman-Merrill Intelligence Scale Vocabulary Test, the Fly Test, the SVFB Test, a test of color vision, and an experimental figure-background test were administered to 401 spastic subjects aged 6 to 16 years. The spastic child's perception of figure increased with length of his observation time; more figure was perceived in color materials; perception was slightly better for three dimensional than for two dimensional materials; and more figure was perceived when a large figure on a large background was presented than with other combinations. A 96-item bibliography is included. (MY)

ABSTRACT 10902

EC 01 0902 ED N.A.
 Publ. Date Feb 68 5p.
 Irwin, Orvis C.
Correct Status of Vowels and Consonants in the Speech of Children with Cerebral Palsy as Measured by an Integrated Test.
 Institute Of Logopedics, Inc., Wichita, Kansas
 National Institute Of Neurological Diseases And Blindness, Bethesda, Maryland
 EDRS not available
 B-1899(C1)
 Cerebral Palsy Journal; V29 N1 P9-12, 15 Jan-Feb 1968

Descriptors: exceptional child research; physically handicapped; tests; cerebral palsy; test results; articulation (speech); speech tests; individual characteristics

In order to standardize an 87-item test described in a manual of articulation for use with children with cerebral palsy, the test was administered to 147 cerebral palsy children aged 3 to 16 in different speech centers, schools, and hospitals. Word lists were read in a quiet examining room to the child who was instructed to repeat the words one by one as the examiner pronounced them. Sex differences showed no statistical significance. The coefficient of correlation of chronological age and articulation scores was .18, of mental age and articulation scores .27, and IQ's and scores .45. Initial and medial consonants in words were significantly more frequent than final consonants, and medial vowels were more frequent than initial vowels. Spastics made a higher mean score on the test than the athetoids. While paraplegics made higher scores than quadriplegics and hemiplegics, the tendency was not significant. Nor was there any significant difference between the mean scores of right and left hemiplegics. There were, however, significant differences among the children when classed according to degree of involvement. There were also significant differences between the means of mild and severe and between moderate and severe quadriplegics, of hemiplegics, and of paraplegics. The results confirm the findings of the preliminary studies of the articulation of children with cerebral palsy. (GD)

ABSTRACT 10959

EC 01 0959 ED N.A.
 Publ. Date Oct 67 3p.
 Dixon, Carmen C.
A Look at Sequential Memory Abilities of a Group of Ten Brain-Injured Children.
 Institute Of Logopedics, Inc., Wichita, Kansas
 EDRS not available
 Cerebral Palsy Journal; V28 N5 P6-8 Sept-Oct 1967

Descriptors: exceptional child research; physically handicapped; cognitive processes; learning; cerebral palsy; visual stimuli; auditory visual tests; visual learning; aural stimuli; sequential learning; memory; learning characteristics;

aural learning; neurologically handicapped

Short term memory (sequential memory of immediate recall) was studied in 10 brain injured children enrolled in a physically handicapped unit and aged from 7-2 to 12-0 years. Visual stimulus material was presented on flash cards while, for the auditory modality, the child was asked to listen and repeat in order what he had heard. Three items were presented and the number increased one at a time until a child failed two of three presentations. This procedure was followed for the visual, auditory, and combined visual-auditory modality at each of four symbolic levels: colors, objects, alphabet letters, and digits. A variety of differences was exhibited in short term sequential memory ability by the children. It was concluded that, if sequencing ability is a major factor in learning, it will be necessary for both teacher and speech therapist to adapt their methods and materials accordingly. Sequencing ability, therefore, must be studied further before teaching efforts are initiated. Four graphs are presented for each of the 10 subjects to show the variety of differences in short term sequential memory among these children. (DF)

ABSTRACT 10975

EC 01 0975 ED N.A.
 Publ. Date 65 175p.
Proceedings of the Cerebral Palsy Workshop (St. Adele, Quebec, September 1965).
 Canadian Rehabilitation Council For The Disabled, Toronto, Ontario
 EDRS not available
 Canadian Rehabilitation Council For The Disabled, 263 McCaul Street, Toronto 2B, Ontario, Canada.

Descriptors: exceptional child services; physically handicapped; program planning; educational needs; cerebral palsy; medical treatment; physicians; self care skills; educational objectives; program evaluation; educational programs; vocational rehabilitation; preschool children; educable mentally handicapped; special programs; trainable mentally handicapped; mentally handicapped; multiply handicapped; social development; Canada

Conference papers discuss the cerebral palsied child and existing Canadian programs for him in order to develop basic guidelines for comprehensive services. Margaret Jones considers questions regarding medical treatment on cerebral palsy and the physician's role in the care of cerebral palsy; Barbara Allen discusses the social world of the cerebral palsied child; M. Sam Rabinovitch treats the education of such a child; and Martin E. McCavitt presents long term goals. Comments and bibliographies accompany each paper. Group reports outline problems and recommendations for Canada's cerebral palsy programs in the areas of the parent and family, the preschool child, the uneducable and educable school child, the multiply handi-

capped, the adolescent, and the adult. Findings of the workshop are summarized by a panel representing areas of medical and health services, education, and rehabilitation. (SB)

ABSTRACT 10994

EC 01 0994 ED N.A.
Publ. Date 67 39p.
Realistic Educational Planning for Children with Cerebral Palsy; Pre-School Level.
United Cerebral Palsy Associations, Inc., New York; New York
EDRS not available
United Cerebral Palsy Associations, Inc., 321 West 44th Street, New York, New York 10036 (\$0.25).

Descriptors: exceptional child education; cerebral palsy; physically handicapped; teaching methods; language development; physical development; mental development; preschool children; infants; student evaluation; parent counseling; kindergarten children; adjustment (to environment); child development

The needs of the young cerebral palsied child in infancy, nursery school, and kindergarten are discussed. Aspects considered include educational classification and philosophy. Techniques are suggested for evaluating the child and for promoting physical and mental development, communication and language development, and emotional and social adjustment on each of the three levels discussed. (LE)

ABSTRACT 11029

EC 01 1029 ED N.A.
Publ. Date Dec 67 6p.
Haskell, Simon H.
Impairment of Arithmetic Skills in Cerebral Palsied Children and a Programmed Remedial Approach.
London University, England
Spastics Society, England
EDRS not available
Journal Of Special Education; V1 N4 P419-24 Dec 1967

Descriptors: exceptional child research; physically handicapped; cerebral palsy; mathematical concepts; arithmetic; learning disabilities; perceptual motor learning; emotional problems; attention span; programed instruction; research reviews (publications)

Studies focusing on the cerebral palsied (CP) child's problems in learning arithmetic skills which suggest that several factors specific to the disability affect arithmetic attainment are reviewed. These factors include lack of sensorimotor experience, higher incidence of ocular defects, disorders in perception, disturbances in visuomotor skills, distractibility, perseveration, difficulty in generalizing, and higher incidence of emotional disturbance. Advantages of programed instruction discussed are that it lessens learning time, increases length of information retention, and betters understanding of subject matter. The author's study is cited in which 21 CP children, aged 9 to 16 years, received a

13-week course of programed instruction covering four basic arithmetic rules while a matched group of similarly handicapped children was taught by conventional methods. Results reported are that both groups showed improvement, programed instruction was equal to the conventional method, and the most handicapped benefited the most from the programed instruction. Refinement of the programed instruction course, with more series of stages, is recommended. (SB)

ABSTRACT 11113

EC 01 1113 ED N.A.
Publ. Date 62 23p.
Carter, John Harvey
Educational Environment for the Orthopedically Handicapped Including the Cerebral Palsied.
California State Department Of Education, Sacramento, Bureau Of Special Education
EDRS not available
John Harvey Carter, 417 20th Street, Sacramento, California 95814.

Descriptors: exceptional child education; physically handicapped; cerebral palsy; orthopedically handicapped; facilities; educational facilities; equipment; educational specifications; facility guidelines; learning characteristics; units of study (subject fields); educational programs; curriculum; school services; physical therapy; occupational therapy; speech therapy; learning activities; recreational facilities; classrooms; school architecture

Prepared as a guide to planners and administrators, the report considers architectural problems in the design of educational facilities for orthopedically handicapped and cerebral palsied children. Factors influencing the learning process and selection of instructional materials are discussed; and daily programs suggesting subject areas, activities, equipment, and schedules are provided for the preprimary, primary, and advanced groups. Further aspects considered include therapy facilities, shop, speech, physical and occupational therapy activities, kitchens, resting rooms, and classrooms and suggested classroom equipment. Also described are special equipment requirements and sizes, controls for lights and so on, braille identification of facilities, hazards, walks, ramps, toilet rooms, playground facilities and equipment, color, floor materials, storage, and access. Nine references are cited. (JD)

ABSTRACT 11353

EC 01 1353 ED N.A.
Publ. Date 65 202p.
Daley, William T., Ed.
Speech and Language Therapy with the Cerebral Palsied Child.
The Catholic University Of America, Washington, D. C.
EDRS not available
The Catholic University Of America Press, Washington, D. C. 20017 (\$2.95).
Proceedings Of The Workshop On Speech And Language Therapy With

The Cerebral Palsied Child, Conducted At The Catholic University Of America, Under The Auspices Of The Director Of Workshops, June 11 To June 22, 1964.

Descriptors: exceptional child education; physically handicapped; speech handicapped; speech therapy; identification; cerebral palsy; clinical diagnosis; etiology; language handicapped; speech habits; neurologically handicapped; learning characteristics; rehabilitation

To enable the practicing speech and hearing clinician to learn procedures of diagnosis and therapy to be used with the cerebral palsied child, the conference treats the following topics: neurological concepts pertaining to the cerebral palsied child, language disorders in children as a component of the spectrum of cerebral dysfunction, and psychological problems contributing to learning disorders in cerebral palsied children. Also considered are differential diagnosis in speech and hearing with the cerebral palsied child, research in speech problems associated with cerebral palsy and implications for the young cerebral palsied child, speech and language educational needs and procedures used with the cerebral palsied child, and speech and language therapy for the cerebral palsied child, reflex therapy and cerebral palsy habilitation. (RS)

ABSTRACT 11358

EC 01 1358 ED N.A.
Publ. Date 67 8p.
Wilson, Barbara C.; Wilson, James J.
Sensory and Perceptual Functions in the Cerebral Palsied: I. Pressure Thresholds and Two-Point Discrimination.
Institute For The Crippled And Disabled, New York, New York;
Queens College, City University Of New York, Flushing, Department Of Psychology
Association For The Aid Of Crippled Children, New York, New York;
Easter Seal Research Foundation, Chicago, Illinois
EDRS not available
Journal Of Nervous And Mental Disease; V145 N1 P53-60 1967

Descriptors: exceptional child research; physically handicapped; perception; tests; cerebral palsy; tactual perception; perceptual development; testing; perception tests; neurologically handicapped; cutaneous sense

Quantitative measurements of pressure thresholds and two-point discrimination were made on the preferred hands of 120 cerebral palsied (CP) subjects, aged 7 to 21 years, and 60 non-neurologically involved control subjects. A modified Von Frey aesthesiometer was used to determine light pressure thresholds and a pair of modified Vernier calipers determined two-point limens. Threshold was that stimulus which elicited a response 50% of the time. Results indicated that 48% of the CP group had one or more sensory deficits and CP thresholds were higher than control group thresholds on pressure-pain and two-point

thresholds. Both the two-point and the pressure-pain tests appeared to top independent functions; group means did not differ significantly for the spastic and athetoid subgroups within the CP group. (SB)

ABSTRACT 11385

EC 01 1385 ED N.A.
Publ. Date 66 33p.
Helsel, Elsie D., Ed.; Graham, Earl C., Ed.

Tomorrow is Today; Planning Ahead for Long Term Care, Legally--Financially.

United Cerebral Palsy Associations, Inc., New York, New York
EDRS not available
United Cerebral Palsy Associations, Inc., 321 West 44th Street, New York, New York 10036 (\$0.10).

Descriptors: exceptional child services; physically handicapped; neurologically handicapped; cerebral palsy; family problems; financial support; residential care; social welfare; insurance programs; personal care homes; health insurance

Intended for parents planning for the needs of children with cerebral palsy, the pamphlet discusses starting to plan for the future, including evaluation, information sources, and follow through and followup. Also considered are where to live and what to do and how to pay for care (the following are mentioned: Social Security, disability benefits, aid to the permanently and totally disabled, veterans' benefits, insurance, and trusts). Means of providing protective supervision are reviewed as are the need for and function of a protective service and the importance of the parents' legal wills. Appended are a list of 42 references and definitions of 33 terms. (LE)

ABSTRACT 11452

EC 01 1452 ED N.A.
Publ. Date 66 2p.

Gerber, Sanford E.

Cerebral Palsy and Hearing Loss.

California University, Santa Barbara

EDRS not available

Cerebral Palsy Journal; V27 N6 P6-7
Nov-Dec 1966

Descriptors: exceptional child research; physically handicapped; cerebral palsy; hearing loss; children; audiology; deaf; etiology; public schools; day schools; classification; incidence

The wide variation in estimates of hearing loss among the cerebral palsied population led to this study of the incidence of hearing loss among various subgroups of cerebral palsied children. Kernicterus was the only etiology considered separately. Students at three California public school day classes received audiometric tests. The ear-choice technique was used. Findings agree with conclusions of previous studies that cerebral palsied children show a higher incidence of hearing loss than the general population, but noted that spastics are an exception. The athetoid and kernicterus group had the poorest hearing. Hear-

ing of erythroblastotics was significantly poorer than that of athetoids with other etiology. Nonkernicterus cases were not significantly different from spastics. Thus the study suggests that on an auditory, neurological, and educational or rehabilitative basis, classifications of spastic and athetoid are oversimplified and of little value, and that a classification system based on etiology would have greater predictive value. (JD)

ABSTRACT 11454

EC 01 1454 ED N.A.
Publ. Date 66 2p.
Irwin, Orvis C.

Length of Declarative Sentences in the Language of Cerebral Palsied Children.

Wichita State University, Kansas, Institute Of Logopedics

National Institute Of Neurological Diseases And Blindness (DHEW), Bethesda, Maryland

EDRS not available

NB-01899-08

Cerebral Palsy Journal; V27 N6 Nov-Dec 1966

Descriptors: exceptional child research; physically handicapped; language; cerebral palsy; sentences; sentence structure; children; sex differences; word frequency; grammar; vocabulary

To determine the number of complete and incomplete declarative sentences in the expressions of cerebral palsied children and the number of words used by these children in both complete and incomplete utterances, a 3-picture test was given to 66 children. The subjects included 33 boys and 33 girls, aged 5 to 16 (average age 12-6) with a mental age range of 4 to 18 years (mean age 10-5). Data on expressions containing both complete and incomplete declarative sentences were analyzed and categorized according to sex to determine the number of complete and incomplete sentences and the length of both kinds of sentences by each sex. It was found that more complete than incomplete declarative sentences were used (p equals .025), the mean for boys on both types of sentences significantly exceeded that of girls (p equals .05), complete sentences had a significantly larger mean number of words per sentence (p equals .001), and there was no apparent sex difference in mean number of words per sentence. (JD)

ABSTRACT 11488

EC 01 1488 ED N.A.
Publ. Date 26 Apr 66 269p.

Neilson, Helle H.

A Psychological Study of Cerebral Palsied Children.

EDRS not available

Scandinavian University Books, Munksgaard, Copenhagen, Denmark.

Descriptors: exceptional child research; physically handicapped; cerebral palsy; learning characteristics; personality problems; perceptual motor coordination; social adjustment; emotional adjustment; testing; individual characteristics; perception

Forty nonhandicapped children were matched with 40 cerebral palsied children, ages 6 to 15, Binet IQ's at least 75, half of whom had spastic hemiplegia and half spastic paraplegia. All of the palsied subjects suffered slight to moderately severe difficulty in movement. Eight tests were administered. Bender's Visual Motor Gestalt Test errors were of a general nature with no specific errors of a high frequency; the handicapped group made significantly more errors; and visuomotor disturbances and personality were not correlated. The Rey Labyrinth Test indicated that the palsied children, even with normal intelligence, had significantly greater difficulties with nonverbal learning than the controls. On at least one of the three projective tests, significantly more spastic than control children were evaluated as displaying signs of moderate or severe personality disorders. One in four of the spastics were estimated as socially maladjusted by parents and teachers. Twice as many hemiplegics as paraplegics had inferior Bender performances and more hemiplegics had personality disorders, probably related to a greater neurological impairment. (DF)

ABSTRACT 11517

EC 01 1517 ED 029 416
Publ. Date 26 May 69 287p.

Frampton, Merle E. And Others

Forgotten Children: A Program for the Multihandicapped.

EDRS not available

Porter Sargent Publisher, 11 Beacon Street, Boston, Massachusetts 02108 (\$6.95).

Descriptors: exceptional child research; multiply handicapped; visually handicapped; cerebral palsy; physically handicapped; case studies (education); student evaluation; individualized instruction; residential schools; physical therapy; recreational activities; therapeutic environment; teaching methods; multisensory learning; speech therapy; creative activities; language development; curriculum; staff role; parent school relationship

In a cerebral palsy-blind experimental school unit for day and residential care, a staff of 13 served 30 children in 6 years with 12 to 17 children each year. All but six children who were found to be nontrainable progressed; eight became trainable, eight trainable and partly educable, and eight educable. Variable progress was found characteristic of most of the children. Group placement was changeable in the three groups for children needing self help and social skills, for children with the greatest learning difficulties, and for children able to benefit from a full academic program. The medical services were the foundation of the program; the residential care given stressed a structured environment with 19 living at the school 10 months a year. Both physical therapy and the therapeutic setting used to teach the children how to play and use their leisure time tried to establish interaction with the world; personality was also

developed by use of any creative ability. Speech therapy was given to 15 children and the language development program, like the academic program, included a total program for all, group programs, and an individual one for each child. The child also kept close involvement with parents. Recommendations were for a total clinic and a multifocal school. Case studies are provided of one child through age 6 and of four girls. (SN)

ABSTRACT 11576

EC 01 1576 ED N.A.
 Publ. Date Oct 67 3p.
 Irwin, Orvis C.; Korst, Joseph W.
Correlations Among Five Speech Tests and the WISC Verbal Scale.
 EDRS not available
 Cerebral Palsy Journal; V28 N5 P9-11
 Sept-Oct 1967

Descriptors: exceptional child research; physically handicapped; speech handicapped; testing; cerebral palsy; intelligence tests; speech tests; correlation; verbal ability; Wechsler Intelligence Scale for Children

Five speech tests were administered to 130 cerebral palsied children, aged 6 through 16 years; the tests were of consonant articulation, sound discrimination, abstraction, vocabulary of use, and vocabulary of understanding. Most of the correlations between the tests, ranging from .08 to .67, were low, suggesting that the tests constituted relatively independent variables; and similar correlations were obtained for a supplementary sample of 40 cerebral palsied children. When the speech tests and the verbal scale of the Wechsler Intelligence Scale for Children (WISC) were administered to 28 cerebral palsied and 52 aphasic children of similar age range, scaled WISC scores correlated at .94 with raw scores on the test of Vocabulary of Understanding and from .09 to .49 with scores on the other four, thus suggesting that the tests measured different aspects of verbal performance in the speech handicapped. (RK)

ABSTRACT 11628

EC 01 1628 ED N.A.
 Publ. Date 66 33p.
 Denhoff, Eric, Ed.; Langdon, Margaret, Ed.
Cerebral Dysfunction; A Treatment Program for Young Children. Clinical Pediatrics Symposium.
 Meeting Street School, Providence, Rhode Island, Children's Rehabilitation Center;
 Miriam Hospital, Providence, Rhode Island
 National Society For Crippled Children And Adults, The Easter Seal Society, 2030 West Ogden Avenue, Chicago, Illinois 60612 (Reprint No. D-37).
 Clinical Pediatrics; V5 N6 P332-65 Jun 1966

Descriptors: exceptional child services; preschool children; physically handicapped; cerebral palsy; medical treatment; interdisciplinary approach; social workers; physical therapy; educational

programs; speech therapy; psychologists; identification; clinical diagnosis; child development; child rearing

Thirteen articles describe the treatment of cerebral dysfunction in young children. Denhoff discusses the role of the pediatrician in the early discovery of cerebral dysfunction; Litchman considers the early orthopedic examination of the child with cerebral dysfunction; Silver and Simon describe several surgical procedures of orthopedic therapy; and Langdon discusses the philosophy and medical policy of the Rhode Island Easter Seal Society's school. Bracing as an aid to orthopedic therapy is commented upon by Spindell; the social worker's role is delineated by Cassidy and Venezia. As part of a home developmental guidance program, physical therapy is treated by D'Wolf and Donnelly, occupational therapy by Komich and Noyes, and speech, hearing, and language therapy by Scory and others. Also described are the psychologist's functions, by Siqueland and Stern, the uses of special education, by Langdon, and the team approach, by Cassidy. (DF)

ABSTRACT 11728

EC 01 1728 ED N.A.
 Publ. Date Oct 67 2p.
 Wildman, Peggy Riggs
The Self-Concept of the Cerebral Palsied Child.
 EDRS not available
 Cerebral Palsy Journal; V28 N5 P5-6
 Sept-Oct 1967

Descriptors: exceptional child education; physically handicapped; child development; personality; cerebral palsy; individual characteristics; self concept; teacher role; self actualization; personality development

The development of self concept in the cerebral palsied child is discussed from several viewpoints. The barrier presented by physical disability and the characteristics of a fully functioning personality are considered; ways of assisting handicapped persons to develop those characteristics are proposed. (SB)

ABSTRACT 11751

EC 01 1751 ED N.A.
 Publ. Date Oct 66 3p.
 Irwin, Orvis C.
A Language Test for Use with Cerebral Palsied Children.
 Wichita State University, Kansas, Institute Of Logopedics
 National Institute Of Neurological Diseases And Blindness, Bethesda, Maryland
 EDRS not available
 Cerebral Palsy Journal; V27 N5 P6-8
 Oct 1966

Descriptors: exceptional child research; tests; language; physically handicapped; language tests; cerebral palsy; language ability; articulation (speech); abstraction tests; auditory discrimination

A battery of four tests was administered to 107 cerebral palsied children (aged 6 to 17) from several southwestern states. Children with hearing losses were ex-

cluded from the sample. The aims of the study were to evaluate their ability to articulate consonants, to discriminate sounds, to abstract meanings and to understand words, to determine interrelation of subtest scores, and to study the effect of sex, type and extent of cerebral palsy and relation of test scores to therapists' ratings of the children's general language ability. Tests were a consonant articulation test, an abstraction test, a test of discrimination of consonant sounds, and the Peabody Picture Vocabulary Test. Mean scores of four subtests and the total battery confirmed previous findings. Correlations among the four tests varied from .18 to .71. Correlation of the total battery with chronological age was .15. The effect of sex, type of cerebral palsy, and degree of involvement was not significant. However, there was a significant trend (p equal .001) in the mean ratings by therapists of general language ability. (JD)

ABSTRACT 11752

EC 01 1752 ED N.A.
 Publ. Date Oct 66 3p.
 Doll, Edgar A.
An Attainment Scale for Appraising Young Children with Expressive Handicaps.
 EDRS not available
 Cerebral Palsy Journal; V27 N5 P3-5
 Oct 1966

Descriptors: exceptional child research; preschool children; tests; achievement; child development; cerebral palsy; communication (thought transfer); creativity; object manipulation; psychomotor skills; intellectual development; physical development; social development; test construction; cognitive processes; expressive language

Difficulties encountered in attempting to appraise achievement of cerebral palsied children led to the development of a scale patterned after the Vineland Social Maturity Scale, to measure and describe overall attainment of preschool children. The scale provides baselines for achievement in three major categories (physical, social, and intellectual) which are divided into eight subcategories: ambulation, manipulation, rapport, communication, responsibility, information, ideation, and creativity. Each subcategory contains one item for each age level from birth to 84 months by 6-month intervals. An examiner observes the child and interviews a qualified informant. Items are scored as plus, minus, or marginal. A clarifying appendix is an aid to scoring. Total item score is correlated with an age scale and interpreted in the light of influential personal and environmental factors. It is anticipated that once the test items are standardized and refined, the scale will be particularly useful in evaluating the culturally deprived and all types of handicapped children. Seven references are cited, and a table of preschool attainment items is given. (JD)

ABSTRACT 11753

EC 01 1753 ED N.A.

Publ. Date Oct 66 1p.
Irwin, Orvis C.
The Relation of a Short to a Long Consonant Test.
EDRS not available
Cerebral Palsy Journal; V27 N5 P10
Oct 1966

Descriptors: exceptional child research; tests; mentally handicapped; physically handicapped; cerebral palsy; speech handicapped; test reliability; rating scales; predictive validity; articulation (speech); speech tests

Short and long tests of consonant articulation (30 and 67 items respectively) were given to 139 handicapped children in order to determine the degree of correlation between the two tests. The short consonant test, in two forms, one for mentally retarded and one for cerebral palsied children, was based on 10 difficult consonant sounds. The long test consisted of the consonant parts of a tests series for cerebral palsied and mentally retarded children. The subjects were patients of whom 9% were mentally normal, 43% were below normal, and 48% were cerebral palsied. Speech and language ability of the normal children varied. Results indicated the following: the correlation coefficient between scores of the two tests was .90; the short test was reliable; and the short test predicted results of the long test with reasonable efficiency (56%), thus indicating its possible use instead of the long test whenever there is a need for economy of time and cost. (JD)

ABSTRACT 11757

EC 01 1757 ED N.A.
Publ. Date Feb 67 6p.
Wildman, Peggy Riggs
A Parent Education Program for Parents of Cerebral Palsied Children.
EDRS not available
Cerebral Palsy Journal; V28 N1 P9-14
Jan-Feb 1967

Descriptors: exceptional child education; physically handicapped; mentally handicapped; cerebral palsy; course organization; community programs; parent education; etiology; child rearing; child development; behavior change; community services; school programs; recreation; adults; religion; discipline; psychological needs

A course outline for an education program for parents of cerebral palsied children includes nine units on causes and effects of cerebral palsy, emotional needs of the child, techniques of habit training, developmental stages of normal and mentally retarded children, discipline of the retarded, the school program, recreation and religion, facilities available within the community and adult needs and prospects for the cerebral palsied. Each unit suggests methods of presentation and questions for small group discussion, and also lists teaching aids and resource materials. The need for yearly evaluation of the program is noted. (GB)

ABSTRACT 11830

EC 01 1830 ED N.A.
Publ. Date Oct 67 2p.
Irwin, Orvis C.; Korst, Joseph W.
A Further Study of the Number and Length of Sentences in the Language of Cerebral Palsied Children.
Wichita State University, Kansas, Institute Of Logopedics
National Institute Of Neurological Diseases And Blindness (DHEW), Bethesda, Maryland
EDRS not available
Cerebral Palsy Journal; V28 N5 P3-4
Sept-Oct 1967

Descriptors: exceptional child research; physically handicapped; language; cerebral palsy; sex differences; language research; sentences; sentence structure; neurologically handicapped; language development; verbal ability

To examine number and length of complete and incomplete sentences, 22 cerebral palsied boys and 22 cerebral palsied girls were matched according to IQ (both means were 97) and chronological age (mean ages were 10.5 years for boys and 11.1 years for girls). The verbal responses to a three-picture test were recorded on tape and classified by sex, structural completeness, and length. Analysis indicated that neither sex differences nor differences between mean numbers of complete and incomplete sentences were significant. The means of boys and girls for the number of words per incomplete and complete sentences were not significant. However, complete sentences were longer than incomplete sentences (p less than .001). (SB)

ABSTRACT 11943

EC 01 1943 ED N.A.
Publ. Date 67 12p.
NINDB Research Profile Number 13:
Cerebral Palsy. Public Health Service Publication No. 1671.
Public Health Service (DHEW), Arlington, Virginia
EDRS not available
Superintendent Of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (\$0.15).

Descriptors: exceptional child research; physically handicapped; cerebral palsy; medical research; pregnancy; preventive medicine; medical treatment; neurologically handicapped; prenatal influences

The problem of cerebral palsy is defined, its causes are detailed, and the research spectrum is described. Research reviewed includes the collaborative Perinatal Project which involves the pregnancy and obstetrical histories of over 55,000 women, and work of the Laboratory of Perinatal Physiology in Puerto Rico, which studies pregnancies in primates and their offspring as well as the evaluation of preventive and treatment methods. Other projects on brain damage are mentioned along with further work on prevention, rehabilitative therapy, and neurosurgical advances. (LE)

ABSTRACT 11992

EC 01 1992 ED 031 024

Publ. Date 69 80p.
Selected Papers from Professional Program Segments of United Cerebral Palsy's Annual Conference (Washington, D. C., March 6-8, 1969).
United Cerebral Palsy Association, New York, New York
EDRS mf.hc

Descriptors: exceptional child services; cerebral palsy; prevention; etiology; medical treatment; handicapped children; rubella; pregnancy; premature infants; mongolism; genetics; parent counseling; multiply handicapped; clinical diagnosis; injuries; lysergic acid diethylamide; financial support; medical research; agency role; educational change; prenatal influences

The proceedings include seven selected papers. In one, Brewster S. Miller reports on the 1968 activities of the Medical and Scientific Department of the United Cerebral Palsy Associations. In another, James J. Gallagher anticipates the next 20 years in special education for the handicapped. Also considered are the following topics: new directions for the next 20 years of research, by Sidney Farber; a blueprint for prevention, by William Berenberg; control of infections contributing to brain dysfunction, by Louis Z. Copper; more effective use of today's knowledge in better prenatal care, by Frederick C. Battaglia; and intrauterine diagnosis of fetal abnormality, by Henry L. Nadler. (JD)

ABSTRACT 12041

EC 01 2041 ED N.A.
Publ. Date 66 100p.
Proceedings of Conference on Protective Supervision and Services for the Handicapped (New Kensington, Pennsylvania, November 15-17, 1966).
United Cerebral Palsy Associations, Inc., New York, New York, Medical And Scientific Department
EDRS not available
United Cerebral Palsy Associations, Inc., Medical And Scientific Department, 66 East 34th Street, New York, New York 10016.

Descriptors: exceptional child services; mentally handicapped; physically handicapped; state programs; community programs; state laws; legislation; older adults; cerebral palsy; family problems; voluntary agencies; referral; social services; agency role; trusts (financial)

Conference addresses cover the need for protective services for the cerebral palsied and the retarded as well as the need in California, the experience and state participation in Minnesota in lifetime planning for the retarded, co-custody law in Washington state, and philosophy, law, and practice in Connecticut. Also discussed are protective services for the mentally retarded in New Jersey; social security and PS; an information referral followup service as an additional resource; the first 5 years of the Massachusetts Association for Retarded Children retardate trust; and the guardianship trust foundation of Michigan.

Also discussed in relation to protective supervision are the following: private financial trusts, activities for older persons, empirical studies of legal aspects, reports from action recorders, and steps to be taken. Three definitions of protective services are appended. (LE)

ABSTRACT 12047

EC 01 2047 ED N.A.
Publ. Date Sep 69 4p.
Netsell, Ronald
Changes in Oropharyngeal Cavity Size of Dysarthric Children.
EDRS not available
Journal Of Speech And Hearing Research; V12 N3 P607-15 Sept 1969

Descriptors: exceptional child research; speech handicapped; motor reactions; cerebral palsy; articulation (speech); prostheses

Subjects were six cerebral palsied children with significant velopharyngeal dysfunction. The following hypothesis was tested: no decrease in the oropharyngeal cavity size will occur during vowel production following the insertion of a velopharyngeal prosthesis. Cinefluorographic measurements revealed a general decrease in oropharyngeal cavity size during low vowel production once a prosthesis was inserted. Significant changes were not observed in the high vowel comparisons. (Author)

ABSTRACT 12063

EC 01 2063 ED N.A.
Publ. Date 67 30p.
Brown, Spencer F.
Cleft Palate, Cerebral Palsy.
EDRS not available
Harper And Row Publishers, Inc., 49 East 33rd Street, New York, New York 10016 (\$7.50).
From Speech Handicapped School Children, Third Edition, Chapter 7, P360-389.

Descriptors: exceptional child education; speech handicapped; cleft palate; physically handicapped; cerebral palsy; medical treatment; speech therapy; teacher attitudes

Cleft palate is described; its characteristic speech and its treatment are considered. In addition, cerebral palsy is discussed in terms of types, effects, characteristic speech and treatment. The classroom teacher's attitude toward the cerebral palsied child and understanding of the physically handicapped are surveyed. (JD)

ABSTRACT 20108

EC 02 0108 ED N.A.
Publ. Date Aug 66 2p.
Gertenrich, Roger L.
A Simple Mouth-Held Writing Device for Use with Cerebral Palsy Patients.
EDRS not available
Mental Retardation; V4 N4 P13-4 Aug 1966

Descriptors: exceptional child research; physically handicapped; cerebral palsy; handwriting; handwriting skills; case studies (education); educational equipment; equipment utilization

A mouth-held device was designed to enable a 29-year-old cerebral palsy patient to write. Practice with the device and subsequently with the hand was gradually increased. After 8 months the patient's condition improved so that he abandoned the device. The design of the device is explained with a figure provided. (JA)

ABSTRACT 20169

EC 02 0169 ED 031 837
Publ. Date 68 100p.
Selected Papers from Professional Program Segments of United Cerebral Palsy's Annual Conference (Houston, Texas, March 21-23, 1968).
United Cerebral Palsy Associations, Inc., New York, New York, Medical And Scientific Department
EDRS mf,hc

Descriptors: exceptional child services; physically handicapped; mentally handicapped; residential centers; architectural programing; institutional facilities; programed instruction; vocational rehabilitation; special services; employment programs; state legislation; program descriptions; federal programs; health services; research projects; cerebral palsy; volunteers; federal aid

Topics covered include the need for a change of attitude in the field of cerebral palsy, facilitation of special education programing through architecture, planning a residential center for the mentally retarded, the role of the architectural psychologists, the inferior condition of residential facilities for the severely handicapped, improved care and treatment in state institutions, programed instruction using TMI-Grollier materials, a program for employment opportunities, and vocational rehabilitation. Also presented are papers on the following subjects: the federal and state governments' role in services for the handicapped; the relationships between the United Cerebral Palsy Association and mental retardation programs, Children's Bureau programs, and the U.S. Office of Education; comprehensive health planning; and a report by the National Medical Department. (RD)

ABSTRACT 20170

EC 02 0170 ED 031 838
Publ. Date 69 71p.
He IHF Plan; The Individual with Cerebral Palsy and His Family.
United Cerebral Palsy Association, Inc., New York, New York
EDRS mf,hc

Descriptors: exceptional child services; physically handicapped; program planning; cerebral palsy; prevention; demonstration programs; program costs; committees; learning disabilities; followup studies; architecture; transportation; rural areas; professional training; agency role; legislation; professional education; public relations; research needs; cooperative programs

Background information, principles of service, and priorities for action preface a five year plan of operation to provide

services for the cerebral palsied. Rationales, objective methods, timetables, financing, and programs are discussed for the following priorities: prevention and early care; comprehensive services for teenagers and adults; children with learning disabilities; information, referral, and followup services; architecture and technological aids; transportation; and service in rural and less populated areas; priorities of implementation which includes consultation and evaluation, influencing legislation, professional education, public information, demonstration projects, action research, and cooperative programing. A financing summary and a policy statement are presented. (RJ)

ABSTRACT 20171

EC 02 0171 ED 031 839
Publ. Date 69 116p.
Highlights of Service Programs. UCPA Affiliate Presentations at 1968 Regional Hearings.
United Cerebral Palsy Association, New York, New York, Medical And Scientific Department
EDRS mf,hc

Descriptors: exceptional child services; physically handicapped; state programs; cerebral palsy; medical consultants; program planning; inservice education; volunteer training; state legislation; tax support; community health services; agency role; preschool programs; dental clinics; clinical diagnosis; home programs; day care programs; residential care; prenatal influences; parent counseling; sheltered workshops

Focusing on community service programs for the cerebral palsied, organizational patterns considered are program implementation, a state advisory and evaluation board, a program committee, continuing staff education, staff training at state schools for the retarded, training sub-professional volunteers, state legislation, and financial support. Various patterns of care are discussed and include a high risk mothers program, interdisciplinary clinics, rural satellite centers, the Rochester Rehabilitation Complex, agreement with the Visiting Nurses Association, the development of dental services, home service programs, day care programs, plans for a residential care facility, and a therapy program. Prevention and early care, infant, pre-nursery, and nursery programs, and services to parents of preschool children are presented as aspects of early care. Adult and teen programs described are the small business enterprises program, sheltered workshops, continuous care for the severely handicapped, a work activity center, and the evolution of an activities program. (RJ)

ABSTRACT 20191

EC 02 0191 ED 031 859
Publ. Date Apr 68 8p.
Homebound and Hospitalized.
Council For Exceptional Children, Washington, D. C.
EDRS mf
From CEC Selected Convention Papers

From The Annual International Convention (46th, New York City, April 14-20, 1968).

Descriptors: exceptional child services; homebound children; hospitalized children; conference reports; cerebral palsy; multiply handicapped; rural clinics; community programs; interdisciplinary approach; educational programs; day care programs

The special children's center for cerebral palsied and multiply handicapped children in a rural area involving a community sponsored multidisciplinary day program is the topic of the presentation by Frances Berko. A rural outpatient program which provides services to children in a six county area previously without sufficient services is discussed. The purposes, structure, and functions of the program are reviewed. This unit of reports is available in microfiche. (WW)

ABSTRACT 20216

EC 02 0216 ED N.A.
Publ. Date 65 369p.
Keats, Sidney
Cerebral Palsy.
EDRS not available
Charles C. Thomas, Publisher, 301-327
East Lawrence Avenue, Springfield, Illinois 62703 (\$12.50).

Descriptors: exceptional child services; cerebral palsy; medical services; medical evaluation; medical treatment; etiology; interdisciplinary approach; multiply handicapped; rehabilitation programs; physical therapy; speech therapy; occupational therapy; preschool children; identification; self care skills; taxonomy; prostheses

Included in the text are the following discussions: the historical background and definition of cerebral palsy, incidence and etiology, applied anatomy and pathological findings, and classification and diagnosis. Methods of treatment presented are treatment goals and the team approach, orthopedic surgery, physical therapy, speech therapy, occupational therapy, bracing, drug therapy, the preschool orientation program, and the role of the coordinator-social worker. Associated handicaps which are considered include visual defects, seizures, hearing defects, sensory defects, and laterality; psychological evaluation is discussed. An appendix presents techniques for teaching dressing skills; references follow chapters. (LE)

ABSTRACT 20300

EC 02 0300 ED N.A.
Publ. Date Apr 65 168p.
Workshop on Cerebral Palsy: Problems of Etiology, Diagnosis, and Treatment (Hotel Richmond, Richmond, Virginia, April 5, 6, 7, 1965).
Richmond Professional Institute, Virginia, School Of Social Work
Public Health Service (DHEW), Neurological And Sensory Disease Service Program
EDRS not available
Richmond Professional Institute, School

Of Social Work, 901 West Franklin Street, Richmond, Virginia 23220.

Descriptors: exceptional child services; cerebral palsy; medical case histories; psychological testing; family problems; medical evaluation; medical treatment; case studies (education)

The problems involved in working with cerebral palsy are discussed as they are seen by physicians, teachers, psychologists, and social workers. Cases are presented to illustrate methods of diagnosis and treatment. Group discussions are summarized and recommendations given. (JP)

ABSTRACT 20420

EC 02 0420 ED N.A.
Publ. Date 66 79p.
Selected Papers from Professional Program Segments of United Cerebral Palsy's Annual Conference (New York, New York, March 10-12, Conference (New York, New York, March 10-12, 1966).
United Cerebral Palsy Associations Inc., New York, New York
EDRS not available
United Cerebral Palsy Associations, Inc., Medical And Scientific Department, 66 East 34th Street, New York, New York 10016.

Descriptors: exceptional child research; physically handicapped; conference reports; vocational rehabilitation; cerebral palsy; rubella; changing attitudes; community attitudes; day care services; medical research; preventive medicine; behavioral science research; federal aid; health programs; health services; welfare services

Papers presented at the conference consider the emerging trends in community health services, changing attitudes toward disability, attitudes toward disability on a college campus, development of services for young children, how infants learn, rubella research, rubella and United Cerebral Palsy Association (UCPA) research, behavioral sciences research, UCPA research and service trends, response to presentation of UCPA-Max Weinstein Award for 1966, and vocational rehabilitation research. Other topics of speeches include government philosophy and funding for health programs for the disabled, the importance of post-grant planning for UCPA affiliates, and regional and state vocational rehabilitation agencies as liaison between federal rehabilitation resources and community needs. Abstracts of recorder's reports of round table discussions treat the subjects of prevention (including related maternal, child health and crippled children's services), day care and developmental centers for children and adults, nursery and pre-nursery programs, elementary and secondary school education, homemaker services for parents of cerebral palsied individuals and for cerebral palsied adults, sources of mental retardation funds applicable to cerebral palsy programs, transportation services, and competitive

(LE)

ABSTRACT 20475

EC 02 0475 ED N.A.
Publ. Date 66 71p.
Lindsay, Zaidee
Art for Spastics.
EDRS not available
Taplinger Publishing Company, 29 East 10th Street, New York, New York 10003 (\$4.95).

Descriptors: exceptional child education; physically handicapped; cerebral palsy; art; art activities; art expression; handicrafts; art materials; teaching methods; motor reactions; psychomotor skills

Plans for art projects which incorporate the careful selection of materials and the use of unorthodox tools are discussed. Each activity is designed to help improve muscular coordination and to provide creative outlets for the hemiplegic spastic child. Chapters give methods and helpful hints in developing projects in cutting into materials, drawing and painting pictures, modeling, space filling with various materials, space filling by printing, and fabric decorating. There are 42 photographs of art work by spastics. (WW)

ABSTRACT 20480

EC 02 0480 ED N.A.
Publ. Date (68) 24p.
Realistic Educational Planning for Children with Cerebral Palsy; Psychological Evaluation.
United Cerebral Palsy Associations, Inc., New York, New York
EDRS not available
United Cerebral Palsy Associations, Inc., 66 East 34th Street, New York, New York 10016 (\$0.25).

Descriptors: exceptional child services; physically handicapped; tests; cerebral palsy; psychologists; standardized tests; psychological evaluation; psychological testing; test interpretation; testing; testing problems

Intended for psychologists working with the cerebral palsied, the manual discusses the role of psychological evaluation, qualifications of psychologists, and arrangements for testing. The place of standardized tests in examining young children, and adolescents and adults with cerebral palsy is considered, as are the use of supplementary tests with children and the measurement of emotional and social maturity. Flexibility in using standardized tests is explained; also explained are the evaluation of the examination, interpretation of test results, and special problems with untestable individuals. (LE)

ABSTRACT 20765

EC 02 0765 ED N.A.
Publ. Date Oct 65 11p.
Argy, William P.
Montessori Versus Orthodox; A Study to Determine the Relative Improvement of the Preschool Child with

Brain Damage Trained by One of the Two Methods.

EDRS not available

Rehabilitation Literature; V26 N10
P294-304 Oct 1965

Descriptors: exceptional child research; learning disabilities; teaching methods; preschool children; minimally brain injured; neurologically handicapped; preschool education; cerebral palsy; mongolism; motivation techniques; child development; methods research; individualized programs; Montessori Method

To compare the Montessori and Orthodox methods of teaching preschool children with brain damage associated with cerebral palsy, Mongolism, or other diagnoses, 71 brain damaged children were taught in two Montessori classes (40 children) and two Orthodox classes (31 children). The teaching program for the Orthodox classes was directed mainly toward the motivation of each child to participate according to his ability in 3, 4, and 5-year-old mental activities. In the Montessori classes each child worked individually at a different level. The children were matched into three groups according to chronological age (71 children), intelligence quotient (16 pairs of children), and mental age (18 pairs). The Gesell tests measured the developmental age of each child at the beginning and end of the study. The mean improvement which was computed in months for ambulation, hand skills, speech, and school variants was greater (in the Montessori classes) for ambulation and school variants in the IQ-matched groups and ambulation in the MA-matched groups. For eight out of the 12 comparisons, the mean changes in developmental quotients favored the Montessori classes; however, the numbers involved in the study were too small to warrant any conclusion that either method is superior to the other. (L.E)

ABSTRACT 20803

EC 02 0803 ED N.A.
Publ. Date 64 50p.

Hessel, Elsie D. And Others
Opening New Doors to the Cerebral Palsied Through Day Care and Development Centers.

United Cerebral Palsy Associations, Inc., New York, New York

EDRS mf,hc

United Cerebral Palsy Associations, Inc., 321 West 44th Street, New York, New York 10036.

Descriptors: exceptional child services; day care services; cerebral palsy; neurologically handicapped; physically handicapped; physical facilities; financial support; admission criteria; clinical diagnosis; recordkeeping; transportation; psychological evaluation; instructional materials; communication skills; perceptual motor learning; self concept; scheduling; mentally handicapped; adult education; professional personnel; parent counseling

Designed for United Cerebral Palsy Association affiliates who are operating or

planning to operate day care or development centers for severely and multiply disabled individuals, this pamphlet considers several aspects of such a program. Administrative considerations focus on sponsorship, operating policies, licensing standards for space and equipment, physical facilities, finances, fees, admissions, discharges, records, transportation, health, and program evaluation. Suggestions for evaluation of participants includes gathering social and developmental history, and medical and psychological evaluations. Programing for both day care and developmental classes is explained and covers the kinds of individuals served, the needs of the individuals, goals (including skills to be taught), and activities. In addition information is provided on methods, scheduling, expectations, and pitfalls. Special considerations are given for adult programs, staffing, and services to parents (feelings and attitudes, participation, future planning). Includes summaries of findings at functioning centers, plant and equipment standards, physical facilities, food care, and a 36-item bibliography. (RJ)

ABSTRACT 20817

EC 02 0817 ED 032 680
Publ. Date 69 167p.

Bowley, Agatha H.; Gardner, Leslie
The Young Handicapped Child: Educational Guidance for the Young Cerebral Palsied, Deaf, Blind, and Autistic Child.

EDRS not available

E. & S. Livingstone Ltd., London, England.

Descriptors: exceptional child education; cerebral palsy; aurally handicapped; visually handicapped; autism; emotionally disturbed; neurologically handicapped; blind; partially sighted; teaching methods; identification; etiology; incidence; reinforcement; residential care; clinical diagnosis; family problems; adjustment (to environment); educational needs; language development

The different classes of handicaps, the size of the problem, the causes, and the principles and methods of psychological and educational care concerning children with partial and total blindness, cerebral palsy, deafness, or autism are discussed. Concepts treated include incidence, etiology, diagnosis, learning difficulties, social and emotional development, family attitudes and problems, and teaching methods. Also considered are occupational therapy and day versus residential schools for the cerebral palsied, language development and training of the hearing impaired, residential care for the blind, and operant conditioning with the autistic. Lists of organizations, literature, and references are provided. (RJ)

ABSTRACT 21092

EC 02 1092 ED N.A.
Publ. Date Aug 69 186p.

Tymchuk, Alexander J.; Knights, Robert M.

A Two Thousand Item Bibliography:

The Description, Etiology, Diagnosis, and Treatment of Children with Learning Disabilities or Brain Damage.

Children's Psychiatric Research Institute, London, Ontario, Canada

Ontario Mental Health Foundation, London, Ontario, Canada

EDRS not available

Children's Psychiatric Research Institute, London, Ontario, Canada.

Descriptors: learning disabilities; minimally brain injured; etiology; clinical diagnosis; bibliographies; aphasia; dyslexia; hyperactivity; cerebral palsy; perceptually handicapped; electroencephalography; psychological evaluation; drug therapy; behavior change; motor development; perceptual motor coordination; teaching methods; followup studies; testing; identification

This 2,000-item bibliography was prepared in order to provide a single comprehensive reference list for individuals interested in the classification, etiology, diagnosis, and treatment of children who are considered to have learning problems or brain damage. Articles dealing with adults and animals, and articles dealing with normal children are not included. The articles have been classified under various headings and arranged alphabetically within the following sub-headings: children with learning disabilities, minimal brain injury, aphasia, dyslexia, hyperactivity, and cerebral palsy; etiology (neurological and educational); electroencephalography and psychological and educational diagnosis; drug therapy and educational treatment; and followup studies. If there are differences in opinion about classification an Author Index is provided to assist in locating a particular article. Approximately 30 articles are listed twice in the bibliography; this repetition was permitted if an outstanding article was cited frequently in the learning problem literature. (Author/RJ)

ABSTRACT 21396

EC 02 1396 ED N.A.
Publ. Date Sep 69 4p.

Fox, Joshua

Breaking Communication Barriers.

EDRS not available

Special Education; V58 N3 P23-6 Sep 1969

Descriptors: exceptional child education; cerebral palsy; communication (thought transfer); information sources; instructional materials; typewriting; educational equipment; individual needs

The various communication aids now available for the cerebral palsied are described including indicators, typewriter aids, expanded keyboard typewriters, and possum-controlled typewriters. Also discussed are training in the use of aids, future aids now under development, and possibilities for financial assistance for the purchase of aids. (RD)

ABSTRACT 21444

EC 02 1444 ED N.A.
Publ. Date Sep 69 4p.

Bowley, Agatha
A Cheyne Follow-Up Study.
EDRS not available
Special Education; V58 N3 P13-6 Sep 1969

Descriptors: exceptional child education; cerebral palsy; followup studies; program evaluation; identification; parent responsibility; placement; special services; mentally handicapped; Great Britain

A longitudinal study of 100 educable and 100 noneducable cerebral palsied children (ages including preschool years through age seven) was conducted during a period of five years to examine problems of learning and adjustment, to estimate predictive value of intelligence tests and to evaluate the general effect of therapy, training and teaching in the early years on subsequent progress. The children, who had all been receiving treatment, training and education at the Cheyne Centre for Spastic Children (London), were examined in terms of physical and mental conditions, placement situations, and progress in the areas of self help, speech and language, social behavior, educational achievement, and employability. Conclusions indicated the importance of early diagnosis and treatment, the need for parent counseling, and the benefits of long-term residential care. (RD)

ABSTRACT 21447

EC 02 1447 ED 034 326
Publ. Date 69 179p.
Thomas, Evan W.; LeWinn, Edward B.
Brain-Injured Children; With Special References to Doman-Delacato Methods of Treatment.
EDRS not available
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703.

Descriptors: exceptions; child education; learning disabilities; neurological organization; sensory training; cerebral palsy; neurological defects; epilepsy; minimally brain injured; dyslexia; environmental influences; therapy; behavior problems; medical evaluation; program evaluation; mentally handicapped; cerebral dominance; etiology

Contents include a definition of brain injury, cerebral palsy, discussions of the pathology of cerebral palsy, incidence and prevalence of cerebral palsy, mental retardation, epilepsy, behavioral disorders, dyslexia, and a summary and conclusions on the problem of brain injury. Attention is also given to the controversy over brain injury as a diagnosis, the background and interpretation of neurological organization, an evaluation of neurological functions, the principles and methods of Doman-Delacato therapeutic programs, and evaluation of the results of treatment of brain injury in children. There are 218 references. (LE)

ABSTRACT 21493

EC 02 1493 ED 034 371
Publ. Date Aug 69 22p.
Love, Russel J.

Effects of Sensory Modality Stimulation on the Dysarthria of Cerebral Palsy.

Vanderbilt University, Nashville, Tennessee, Division Of Hearing And Speech Sciences

Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped

EDRS mf,hc
OEG-0-9-522043-2326(032)
BR-52-2043

Descriptors: exceptional child research; cerebral palsy; speech handicapped; speech therapy; speech improvement; aural stimuli; verbal stimuli; visual stimuli; speech tests; age differences; sex differences; articulation (speech); intelligence quotient; sensory; training

To explore the efficacy of improving the dysarthria of cerebral palsy under conditions of aural stimulation, visual stimulation, and combined aural-visual stimulation, 22 subjects (aged 7.6 to 19.0 years) received intensive stimulation for word imitation for 22 consecutive school days. The 87 words of the Irwin Integrated Articulation Test were randomized and presented over a series of nine stimulations of four new words each day. The results were that combined aural-visual stimulation produced fewer errors than aural stimulation alone; errors from visual stimulation alone could not be meaningfully calculated. Words under aural-visual stimulation were rated as significantly improved from the third to the twentieth day but were still considered below average on the scale. The difficulty of sound production did not differentiate conditions analyzed according to manner or articulation or place of articulation. Voicing improved under aural-visual stimulation, but negligible correlations were obtained with sex differences, age, and IQ. Indications were that brief periods of cumulative imitation under aural-visual stimulation can bring about better motor control for articulation in cerebral palsy. Author/JM)

ABSTRACT 21695

EC 02 1695 ED N.A.
Publ. Date Jun 65 8p.
Myers, Patricia

A Study of Language Disabilities in Cerebral Palsied Children.

EDRS not available
Journal Of Speech And Hearing Research; V8 N2 P129-36 Jun 1965

Descriptors: exceptional child research; physically handicapped; cerebral palsy; language ability; test validity; psycholinguistics; testing; Illinois Test of Psycholinguistic Abilities

To determine whether the Illinois Test of Psycholinguistic abilities (ITPA) can differentiate between cerebral palsied children of the athetoid type and spastic cerebral palsied children in language ability, the ITPA was administered to 68 spastic, 24 athetoid, and 32 normal children. Age, cognitive ability, and social experience were controlled. The test scores were subjected to factor analysis,

analysis of variance, and discriminant analysis. Significant differences were found favoring the spastic group on the automatic-sequential level and the athetoid group on the representational level of language. The conclusion was that there is a basic difference in the language structure of the types of cerebral palsied children. The types were separated by two subtests on both the representational and the automatic-sequential levels, indicating the capacity of the ITPA to differentiate between the types. Tables of results are included and aspects of language which require particular emphasis in instructional programs for the two cerebral palsy groups are noted. (MK)

ABSTRACT 21787

EC 02 1787 ED N.A.
Publ. Date Feb 66 19p.
Flower, Richard M. And Others
The Communicative Disorders of Children with Kernicteric Athetosis: I. Auditory Disorders.
EDRS not available
Journal Of Speech And Hearing Disorders; V31 N1 P41-59 Feb 1966

Descriptors: exceptional child research; cerebral palsy; aurally handicapped; multiply handicapped; Rh factors; hearing loss; auditory evaluation; recall (psychological); auditory discrimination; auditory perception

Auditory function was studied in 30 cerebral palsied children, 15 of whom had kernicteric athetosis (KA) and hearing impairment and 15 of whom had athetosis of other etiology and normal hearing. A third group consisted of 15 hearing impaired children with no central nervous dysfunction or history of parental Rh incompatibility. Histories given by the parents suggested that the hearing losses of KA children were identified later than those of the other group. In recall of sequences of digits, the KA children scored lower than the other hearing loss group, and the athetoid normal hearing group scored lowest of all. However, the hearing impairment of the KA children did not differ in regard to changes in sensitivity level, auditory discrimination or use of amplification. (Author/EB)

ABSTRACT 21788

EC 02 1788 ED N.A.
Publ. Date Feb 66 9p.
Flower, Richard M. And Others
The Communicative Disorders of Children with Kernicteric Athetosis: II. Problems in Language Comprehension and Use.
EDRS not available
Journal Of Speech And Hearing Disorders; V31 N1 P60-8 Feb 1966

Descriptors: exceptional child research; cerebral palsy; aurally handicapped; multiply handicapped; Rh factors; language development; verbal development; reading ability; vocabulary development

Tests measuring verbal functions were administered to children with kernicteric

ic athetosis (KA) and hearing impairment, with athetosis and normal hearing, or with hearing impairments but no central nervous dysfunction or parental Rh incompatibility. Parents described their children in hearing loss groups as slower to develop an understanding of language. Normal hearing athetoid had the slowest development of intelligible speech and poorer reading skills and reading comprehension. KA children scored lower than normal athetoids on tests of expressive and receptive vocabulary as did the hearing loss group. When interest differences were observed, the normal hearing athetoid group was more variable, but the other two groups did not differ. Thus, differences in language function peculiar to kernicteric athetoid children were not found. (Author/EB)

ABSTRACT 21849

EC 02 1849 ED N.A.
 Publ. Date May 70 4p.
 Stone, Martin C.
Behavior Shaping in a Classroom for Children with Cerebral Palsy.
 EDRS not available
 Exceptional Children; V36 N9 P671-7
 May 1970

Descriptors: exceptional child education; physically handicapped; behavior change; cerebral palsy; classroom environment; positive reinforcement; teaching methods; rewards; behavior problems

Seven boys diagnosed as cerebral palsied with possible diffuse organic brain damage participated in a classroom behavior shaping technique consisting of reinforcing or rewarding correct or desired behavior and not rewarding (ignoring) inappropriate behavior. Descriptions of behavior patterns and specific techniques are provided. Results based on observations indicated overall improvement in behavior patterns of the class. (RD)

ABSTRACT 22051

EC 02 2051 ED N.A.
 Publ. Date 69 327p.
 Wolf, James M., Ed.
The Results of Treatment in Cerebral Palsy.
 EDRS not available
 Charles C Thomas, Publisher, 301-327
 East Lawrence Avenue, Springfield, Illinois 62703 (\$20.50).

Descriptors: cerebral palsy; minimally brain injured; neurological handicapped; evaluation techniques; diagnostic tests; clinical diagnosis; occupational therapy; physical therapy; motor development; Doman Delacato Method

A compilation of papers, the text presents research findings and theories concerning the measurement of treatment results. Three articles discuss historical background in cerebral palsy while four articles deal with evaluation methods. Nine studies of the results of treatment include the role of physical and occupational therapy, the Doman-Delacato

Method, and early treatment. Developmental and assessment scales are described in eight papers which present several tests and evaluation instruments. (RJ)

ABSTRACT 22109

EC 02 2109 ED 023 143
 Publ. Date Jun 68 143p.
 Muthard, John E.; Hutchinson, Jack
Cerebral Palsied College Students, Their Education and Employment.
 Florida University, Gainesville
 Social And Rehabilitation Service (DHEW), Washington, D. C.;
 United Cerebral Palsy Association, New York, New York
 EDRS mf,hc
 CPCS Study, United Cerebral Palsy Association, Inc., 66 East 34th Street, New York, New York 10016.

Descriptors: exceptional child research; cerebral palsy; college attendance; employment opportunities; physically handicapped; adjustment problems

Investigated were the problems of college students who have cerebral palsy, and the barriers which may confront them during post-college employment years. Investigated were situations encountered in college and the methods used to overcome difficulties, the student's evaluation of a college education, and the effect of educational experiences and personal characteristics on post-college employment. A group of young cerebral palsied college students provided the data, describing their post-college and employment experiences. The responses of these individuals were tabulated to secure normative data or permit comparisons with findings from other college student groups. Personal, educational, and vocational characteristics of these students were compared with those of nonimpaired students. Personal, educational, and vocational characteristics of those cerebral palsied students employed in jobs related to education were compared with those employed in jobs not related to education. The major findings and implications are discussed in terms of student characteristics, college problems, education and employment, and parental attitudes. The instruments used in this series of studies and tabulations of statistical findings are appended. (Author/IM)

ABSTRACT 22214

EC 02 2214 ED 037 866
 Publ. Date 69 27p.
 Fassler, Joan
Performance of Cerebral Palsied Children under Conditions of Reduced Auditory Input on Selected Intellectual, Cognitive and Perceptual Tasks.
 Columbia University, New York, New York, Teachers College
 Office Of Education (DHEW), Washington, D. C.
 EDRS mf,hc
 RR-6

Descriptors: exceptional child research; physically handicapped; cerebral palsy; task performance; aural stimuli; memo-

ry; learning characteristics; cognitive processes; motor reactions

The study investigated the task performance of cerebral palsied children under conditions of reduced auditory input and under normal auditory conditions. A non-cerebral palsied group was studied in a similar manner. Results indicated that cerebral palsied children showed some positive change in performance, under conditions of reduced auditory input, on a recall of missing picture test and an attention test and on certain parts of a learning test and digit span test. They showed no change in performance on visual-perceptual or perceptual-motor tasks. The non-cerebral palsied children showed no significant change in performance under conditions of reduced auditory input. However, since the difference scores of the non-cerebral palsied group did move in a positive direction, a comparison of the performance of the cerebral palsied and the non-cerebral palsied children did not show a statistical difference in the amount of positive change exhibited by the two groups. (Author)

ABSTRACT 22230

EC 02 2230 ED 037 882
 Publ. Date 70 224p.
 Finnie, Nancie R.
Handling the Young Cerebral Palsied Child at Home.
 EDRS not available
 E. P. Dutton And Company, Inc., 201
 Park Avenue South, New York, New York 10003 (\$6.95).

Descriptors: exceptional child services; cerebral palsy; parent education; physical development; child care; motor development; parent role; physical activities; physically handicapped

Written primarily for parents of cerebral palsied children, the text discusses and illustrates methods for handling the child in daily activities. Introduced with a questionnaire concerning developmental stages and activity levels, the manual describes the most common difficulties of the spastic, athetoid, ataxic, or flaccid child. Drawings and explanations included concern general advice, the development of movement, carrying, bathing, toilet training, dressing, feeding, transporting devices, sleeping, play, and linking play with everyday activities. Also provided are lists for additional reading, terminology, and suppliers of accessories and equipment. (JM)

ABSTRACT 22410

EC 02 2410 ED N.A.
 Publ. Date 69 178p.
 Thomas, Evan W.
Brain-Injured Children.
 EDRS not available
 Charles C. Thomas, Publisher, 301-327
 East Lawrence Avenue, Springfield, Illinois 62703 (\$7.00).

Descriptors: exceptional child research; minimally brain injured; neurological defects; neurology; medical evaluation; medical treatment; cerebral palsy; dyslexia; mentally handicapped; epilepsy;

neurological organization; behavior problems; Delacato Method

Past practices, functional diagnosis, management techniques, and treatment methods concerning brain injured children are discussed. The problems with old approaches and the need for new techniques are presented for brain injury, cerebral palsy, the pathology of cerebral palsy, its incidence and prevalence, mental retardation, epilepsy, behavioral disorders, and dyslexia. The advantages of a functional approach are included in descriptions of the controversy over brain injury as a diagnosis, the background and interpretation of neurological organization, the evaluation of neurological functions, and the principles and methods of Doman-Delacato therapeutic programs. Also included is an article by Edward B. LeWinn on evaluating the results of treatment of brain injury in children. (JM)

ABSTRACT 22785

EC 02 2785 ED N.A.
Publ. Date 62 96p.
Michal-Smith, Harold; Kastein, Shulamith

The Special Child: Diagnosis, Treatment, Habilitation; Cerebral Palsy.
New School For The Special Child, Seattle, Washington
Washington University, Seattle
EDRS not available
New School For The Special Child, Inc., 71 Columbia Street, Seattle, Washington 98104.

Descriptors: exceptional child education; cerebral palsy; parent role; speech; parent education; speech therapy; clinical diagnosis; language

Topics of papers included are experiential programing for cerebral-palsied child by Harold Michal-Smith and speech hygiene guidance for parents of children with cerebral palsy, and cerebral palsy: current problems of diagnosis and assessment in language and speech both by Shulamith Kastein. The papers were prepared in conjunction with lectures delivered at the Northwest Summer Conference (July, 1960, University of Washington, Seattle) for lay and professional personnel interested in learning disabilities associated with brain injury. For topics of other papers see abstracts EC 004 404 to EC 004 406 and EC 004 408 to EC 004 409. (MS)

ABSTRACT 22813

EC 02 2813 ED N.A.
Publ. Date 63 56p.

Mysak, Edward D.
Principles of a Reflex Therapy Approach to Cerebral Palsy.
Teachers College, Columbia University
Teachers College Press, Columbia University, West 120th Street, New York, New York 10027 (\$1.75).

Descriptors: exceptional child research; physically handicapped; cerebral palsy; therapy; perceptual motor learning; neurology; motor development; psychomotor skills; speech therapy; physical therapy; reflex therapy

The book considers the contribution that reflex therapy may make to the habilitation of the child with cerebral palsy. First are formulated theoretical constructs; the definition of cerebral palsy is derived from concepts concerning the evolution and dissolution of the nervous system and duplex symptomatology; and these principles are then integrated into a broader neurophysiological explanation of the effects of reflex therapy. Human reflexology is studied with emphasis on the application of these concepts to diagnosis and therapy. The remainder of the book is devoted to the practice of reflex therapy. The description of basic procedures involves both general approaches and supplementary techniques for speech and occupational habilitation. Considerations relevant to establishing such a therapy program are examined, including staffing, criteria for selecting candidates, records, and criteria for terminating therapy. The results of a pilot study investigating this approach are summarized. The appendixes reproduce a table of reflexive maturation and motor development and furnish sample forms. (BG)

ABSTRACT 22911

EC 02 2911 ED N.A.
Publ. Date 61 62p.

Westlake, Harold; Rutherford, David
Speech Therapy for the Cerebral Palsied.
EDRS not available
National Easter Seal Society For Crippled Children And Adults, 2023 West Ogden Avenue, Chicago,

Descriptors: exceptional child services; speech handicapped; cerebral palsy; speech therapy; motor development; psychological characteristics; social maturity; speech evaluation; behavior patterns; clinical diagnosis; physiology

Written for professional workers in the field of cerebral palsy, the pamphlet suggests a practical approach to speech therapy. The general organization of the speech and hearing examination, the assessment of expressive, receptive and conceptual behavior, and the examination of the speech mechanism are discussed. Aspects of speech therapy considered are the psychological and social readiness for oral language and both non-specialized and specialized speech training techniques. General training principles include the rationale and techniques for several types of motor control; special applications of techniques related to the speaking process cover breathing, phonation, gross movements of the tongue, lips, and jaw, the facial muscles, and orthodontic problems. Photographs of therapy techniques are numerous. (GD)

ABSTRACT 22938

EC 02 2938 ED N.A.
Publ. Date 54 113p.

Hopkins, Thomas W. And Others
Evaluation and Education of the Cerebral Palsied Child: New Jersey Study.
EDRS not available

Council For Exceptional Children, 1411 South Jefferson Davis Highway, Jefferson Plaza Suite 900, Arlington, Virginia 22202 (Out Of Print).

Descriptors: exceptional child research; physically handicapped; cerebral palsy, state surveys; educational needs; adjustment (to environment); psychological studies; educational therapy; parent counseling; etiology; intelligence level; parent attitudes; special schools; academic achievement; New Jersey

From 1936 to 1951 over 2,000 cerebral palsied individuals were given medical and psychological examinations in clinics conducted by the Crippled Children Commission in New Jersey. The records of the 1505 active cases are reported in these areas: detailed physical findings for the State Group of 1406 cases aged 1 to 21 years; physical and educational findings for the School Group of 99 (students attending the A. Harry Moore School); psychological findings and evaluation; psychological factors revealed by parents and parent counseling; educational therapy and training; and integration of services. There are 33 tables of descriptive information and 21 illustrations. (LE)

ABSTRACT 22977

EC 02 2977 ED N.A.
Publ. Date Sum 70 9p.

Vernon, McCay
Clinical Phenomenon of Cerebral Palsy and Deafness.
EDRS not available
Exceptional Children; V36 N10 P743-51 Sum 1970

Descriptors: exceptional child research; aurally handicapped; cerebral palsy; etiology; clinical diagnosis; multiply handicapped

The clinical phenomenon of deafness and cerebral palsy is investigated based on a study of 69 cases. Intelligence, psychological adjustment, educational achievement, communication skills, physical disabilities, audiometric patterns, etiological factors, and prevalence are reported. From this information, steps for prevention and habilitation are developed. The future epidemiology of the condition is projected based on an integration of the research findings and on current medical advances in the treatment and prevention of complications of Rh factor, rubella, and meningitis. (Author)

ABSTRACT 23019

EC 02 3019 ED N.A.
Publ. Date 61 40p.

Shere, Marie Orr
Speech and Language Training for the Cerebral Palsied Child at Home.
EDRS not available
Interstate Printers And Publishers, 19-27 North Jackson Street, Danville, Illinois (\$1.00).

Descriptors: exceptional child education; cerebral palsy; speech handicaps; speech therapy; speech instruction; parent participation; teaching techniques; home instruction

Written for parents of cerebral palsied children, the booklet suggests ways in which they may work with the child's speech when a qualified teacher is not available. Relaxation is emphasized, both in the home atmosphere and with specific exercises. The importance of speech related activities (chewing, sucking, and swallowing), motivating the child to talk, and general speech improvement are explored, including specific suggestions for working with cerebral palsied children. Mouth exercises, books, stories, toys, and good speech models are recommended among other things. When speech development is delayed, the booklet recommends that the parent take the child to a clinic for evaluation. General instructions for giving lessons stress pleasant surroundings and regular schedule. Specific games and seasonal activities are listed. Appendixes contain a speech evaluation form, suggested physical exercises (for relaxation, breathing, coordination), reprints of pertinent articles by the author, additional lesson material, and rules for therapy. (JB)

ABSTRACT 23041

EC 02 3041 ED N.A.
Publ. Date 60 135p.

Moed, Martin G., Coord.
Cerebral Palsy. Work Classification and Evaluation Project 1955-60, Volume I. Final Report.

EDRS not available
Institute For The Crippled And Disabled, 400 First Avenue, Corner 23rd Street, New York 10, New York.

Descriptors: physically handicapped; vocational rehabilitation; cerebral palsy; evaluation; employment problems; evaluation techniques; demonstration projects; community programs; vocational counseling; adults; research projects

A research and demonstration project studied procedures for evaluating the vocational potential of cerebral palsied adults. A special vocational evaluation unit established in 1955 at the Institute for the Crippled and Disabled, New York, utilized the work sample technique to assess vocational performance and predict job achievement. Job tasks included activities found in clerical, semi-skilled, unskilled and service occupations. Clients received a complete medical review, including occupational and physical therapy, psychological testing, psychiatric screening if indicated, and speech and hearing examinations during the seven-week evaluation. The manual discusses community organization and planning before the client enters evaluation, operational procedures, work samples, and evaluation as a diagnostic and therapeutic medium. Appendixes include evaluation forms, illustration of equipment adaptations, a list of equipment and tools, work sample test sheets, and evaluation criteria. Volume II of the project report presents follow-up studies, observations, bibliography related to the project, and recommendations. (LE)

ABSTRACT 23043

EC 02 3043 ED N.A.
Publ. Date 52 172p.

Froeschels, Emil
Dysarthric Speech (Speech in Cerebral Palsy).

EDRS not available
Expression Company, Publishers, Magnolia, Massachusetts.

Descriptors: speech handicapped; neurological defects; neurological organization; etiology; cerebral palsy; speech therapy; articulation (speech); voice disorders; motor reactions; dysarthric speech

In order to make the book useful to both laymen and scientists, technical aspects of dysarthric speech have been simplified. Introductory chapters treat brain and central nervous system function, especially as related to speech function and development. The etiology and symptomatology of dysarthrias are covered; dysarthric speech is described, including separate functions involved in breathing, voice, articulation, stigmatism and rhinolalia. Subsequent chapters are devoted to therapy, which begins with voluntary muscle training, progresses to speech muscle training, and finally to speech training itself. A final chapter describes multiple handicaps, emphasizing cerebral palsy. (JB)

ABSTRACT 23141

EC 02 3141 ED N.A.
Publ. Date 58 326p.

Wolfe, William G.; Reid, L. Leon
A Survey of Cerebral Palsy in Texas.

EDRS not available
United Cerebral Palsy Of Texas, 1010 Lavaca, Austin, Texas 78701.

Descriptors: exceptional child research; physically handicapped; state surveys; cerebral palsy; questionnaires; etiology; incidence; medical treatment; medical case histories; socioeconomic status; parent attitudes; occupations; skill development; literature reviews; bibliographies; Texas

Data were obtained on cerebral palsied persons living in Texas by: a brief questionnaire completed by (or for) 3692 out of 5618 known cases, an extensive case history questionnaire or follow-up interview for 2408 cases, and a parental opinion questionnaire for 1753 cases. Results are reported and research literature is reviewed in these areas: prevalence and incidence, prevalence of types of cerebral palsy and degree of involvement, etiological factors, other medical factors, developmental patterns, education, medical treatment and care, occupations, family social status and value orientations, and opinions of parents. The procedure followed in locating cerebral palsied persons is detailed. Included are 111 tables and a 236 item bibliography. (LE)

ABSTRACT 23168

EC 02 3168 ED N.A.
Publ. Date 70 4p.

Herron, Carole Jane
Some Effects of Instrumental Music

Training on Cerebral Palsied Children.

EDRS not available
Journal Of Music Therapy; V7 N1 P55-8 Sum 1970

Descriptors: exceptional child research; physically handicapped; cerebral palsy; motor development; perceptual motor coordination; music education; musical instruments; Hohner Melodica

To examine the possibility of improving the muscular coordination of cerebral palsied children through instruction in a musical instrument, four cerebral palsied subjects (athetoid, spastic, and tremor types, ages 9 to 11 years) were given individual lessons twice a week for 12 weeks. Evaluation was based on writings by the investigator, a panel of evaluative judges, and the Belwin Singing Achievement Test. Results showed improvement in muscular coordination and breath support in all subjects with musical performance achievement varying according to the severity of muscular dysfunction and mental retardation. (RD)

ABSTRACT 23286

EC 02 3286 ED N.A.
Publ. Date 60 62p.

Dorward, Barbara
Teaching Aids and Toys for Handicapped Children.

EDRS not available
National Education Association, 1201 16th Street, N. W., Washington, D. C. 20005

Descriptors: exceptional child education; physically handicapped children; instructional materials; preschool children; cerebral palsy; toys; puzzles; instructional aids

Homemade pegboard and puzzle-type aids for preschool cerebral palsied and other handicapped children are illustrated. Materials and methods of construction are specified, and purpose and use are described. Included are five toys, five shape perception aids, three size perception aids, four color matching aids, three reading readiness aids, and seven number readiness aids. The aids and toys have been used with cerebral palsied, brain injured, mentally handicapped, and multiply handicapped children. The materials developed for size and shape perception have been used with visually handicapped children. (LE)

ABSTRACT 23535

EC 02 3535 ED N.A.
Publ. Date 62 382p.

Wolfe, William G., Ed.
Summary of the Activities of the Tenth Annual United Cerebral Palsy Workshop (June 12-July 20, 1962, University of Texas).

EDRS not available
University Of Texas, Sutton Hall 305, Austin, Texas 78712.

Descriptors: exceptional child education; physically handicapped; cerebral palsy; medical treatment; speech therapy; occupational therapy; physical ther-

apy; educational needs; psychological evaluation; family relationship; social adjustment; conference reports

Reports of the workshop on cerebral palsy treat medical aspects, psychological assessment and evaluation, the fami-

ly, and the challenge of the accepted cerebral palsied. Also covered are education, vocational rehabilitation, and speech, physical, and occupational therapy. (JD)

AUTHOR INDEX

Adams, Forrest H 10419.
 Argy, William P 20765.
 Best, Gary A 10721.
 Bowley, Agatha 20817, 21444.
 Brown, Spencer F 12063.
 Cann, Cairbre 10058.
 Carter, John Harvey 11113.
 Cruickshank, William M 10097, 10874.
 Daley, William T, Ed 11353.
 Denhoff, Eric, Ed 11628.
 Dixon, Carmen C 10959.
 Doll, Edgar A 11752.
 Dorward, Barbara 23286.
 Fassler, Joan 22214.
 Finnie, Nancie R 22230.
 Flower, Richard M And Others 21787-21788.
 Fox, Joshua 21396.
 Frampton, Merle E And Others 11517.

Froeschels, Emil 23043.
 Gerber, Sanford E 11452.
 Gertenrich, Roger L 20108.
 Haskell, Simon H 11029.
 Hatton, Daniel A 10424.
 Helse, Elsie D And Others 20803.
 Helse, Elsie D, Ed 11385.
 Herron, Carole Jane 23168.
 Hopkins, Thomas W And Others 22938.
 Irwin, Orvis C 10902, 11454, 11576, 11751, 11753, 11830.
 Keats, Sidney 20216.
 Lindsay, Zaidee 20475.
 Love, Russel J 21493.
 McDonald, Eugene T 10115.
 Mecham, Merlin J 10412.
 Michal-Smith, Harold 22785.
 Moed, Martin G, Coord 23041.
 Muthard, John E 22109.

Myers, Patricia 21695.
 Mysak, Edward D 10780, 22813.
 Neilson, Helle H 11488.
 Netsell, Ronald 12047.
 Oswin, Maureen 10814.
 Robinault, Isabel P, Comp 10354.
 Shere, Marie Orr 23019.
 Stone, Martin C 21849.
 Thomas, Evan W 21447, 22410.
 Tymchuk, Alexander J 21092.
 Vernon, McCay 22977.
 Westlake, Harold 22911.
 Wildman, Peggy Riggs 11728, 11757.
 Wilson, Barbara C 11358.
 Wolf, James M, Ed 22051.
 Wolfe, William G 23141.
 Wolfe, William G, Ed 23535.

SUBJECT INDEX

Abstract Reasoning 11751.
 Academic Achievement 22938.
 Achievement 11752.
 Adjustment Problems 22109.
 Adjustment (To Environment) 10814, 10994, 20817, 22938.
 Admission Criteria 20803.
 Adolescents 10058, 10373, 10874.
 Adult Education 20803.
 Adults 10058, 11757, 23041.
 Age Differences 21493.
 Agencies 10721.
 Agency Role 11992, 12041, 20170-20171.
 Annotated Bibliographies 10354, 10373.
 Aphasia 21092.
 Architectural Programing 20169.
 Architecture 20170.
 Art 20475.
 Art Materials 20475.
 Articulation (Speech) 10902, 11751, 11753, 12047, 21493, 23043.
 Attention Span 11029.
 Attitudes 10814.
 Audiology 11452.
 Audiovisual Instruction 10354.
 Auditory Perception 11751, 21787.
 Auditory Tests 21787.
 Auditory Training 10412.
 Auditory Visual Tests 10959.
 Aural Learning 10959.
 Aural Stimuli 10959, 21493, 22214.
 Aurally Handicapped 10097, 20817, 21787-21788, 22977.
 Autism 20817.
 Behavior 10373, 10412, 10780, 10814.
 Behavior Change 11757, 21092, 21849.
 Behavior Patterns 22911.
 Behavior Problems 10814, 21447, 21849, 22410.
 Behavior Theories 10780.
 Behavioral Sciences 20420.
 Bender Gestalt Test 10097.
 Bibliographies 21092, 23141.

Binet Vocabulary Test 10874.
 Biochemistry 10726.
 Blind 20817.
 Canada 10975.
 Case Records 10814.
 Case Studies (Education) 11517, 20108, 20300.
 Catalogs 10354.
 Changing Attitudes 20420.
 Child Care 22230.
 Child Development 10726, 10780, 10814, 10994, 11628, 11728, 11752, 11757, 20765.
 Child Rearing 11628, 11757.
 Classification 10115, 11452.
 Classroom Environment 21849.
 Cleft Palate 12053.
 Clinical Diagnosis 10097, 10373, 10565, 10726, 11353, 11628, 11992, 20171, 20803, 20817, 21092, 22051, 22785, 22911, 22977.
 Clinics 10565, 20171, 20191.
 Cognitive Development 10994.
 Cognitive Processes 10959, 11752, 22214.
 College Students 22109.
 Communication Problems 10058.
 Communication Skills 20803.
 Communication (Thought Transfer) 10058, 10412, 11752, 21396.
 Community Attitudes 10097, 20420.
 Community Health 20171.
 Community Planning 10097.
 Community Programs 11757, 12041, 20191, 23041.
 Community Services 10565, 11757.
 Concept Formation 10005.
 Conference Reports 10419, 20191, 20420, 23535.
 Cooperative Programs 10726, 20170.
 Correlation 11576.
 Course Organization 11757.
 Creative Expression 11517.

Creativity 11752.
 Curriculum 10412, 11113, 11517.
 Cutaneous Sense 11358.
 Day Care Programs 20171, 20191, 20420, 20803.
 Day Schools 11452.
 Deaf 11452.
 Demonstration Projects 20170, 23041.
 Dental Health 20171.
 Diagnostic Tests 10373, 10419, 22051.
 Discipline 10424, 11757.
 Doman Delacato Method 22051, 22410.
 Drug Therapy 21092.
 Dysarthric Speech 23043.
 Dyslexia 21092, 21447, 22410.
 Early Childhood Education 10412, 20171, 20765.
 Educable Mentally Handicapped 10975.
 Educational Diagnosis 10565.
 Educational Equipment 10005, 20108, 21396.
 Educational Facilities 11113.
 Educational Needs 10975, 11992, 20817, 22938, 23535.
 Educational Objectives 10975.
 Educational Programs 10975, 11113, 11628, 11757, 20191.
 Educational Therapy 10412, 22938.
 Electroencephalography 21092.
 Electromechanical Aids 10058.
 Emotional Adjustment 11488.
 Emotional Problems 11029.
 Emotionally Disturbed 20817.
 Employment 10097, 23041.
 Employment Opportunities 10419, 20169, 22109.
 Environmental Influences 10814, 21447.
 Epilepsy 21447, 22410.
 Equipment 11113.
 Equipment Utilization 20108.
 Etiology 10115, 10373, 10565, 10726, 11353, 11452, 11757, 11992, 20216, 20817, 21092, 21447, 22938, 22977, 23043, 23141.

- Evaluation 10419, 23041.
 Evaluation Methods 22051, 23041.
 Evolution 10780.
 Exceptional Child Education 10005, 10097, 10115, 10354, 10373, 10412, 10419, 10424, 10588, 10721, 10780, 10814, 10994, 11113, 11353, 11728, 11757, 12063, 20475, 20817, 21396, 21444, 21447, 21849, 22785, 23019, 23286, 23535.
 Exceptional Child Research 10058, 10726, 10874, 10902, 10959, 11029, 11358, 11452, 11454, 11488, 11517, 11576, 11751-11753, 11830, 11943, 12047, 20108, 20420, 20765, 21493, 21695, 21787-21788, 22109, 22214, 22410, 22813, 22938, 22977, 23141, 23168.
 Exceptional Child Services 10565, 10975, 11385, 11628, 11992, 12041, 20169-20171, 20191, 20216, 20300, 20480, 20803, 22230, 22911.
 Facilities 10005, 11113, 20169, 20803.
 Family Influence 10814.
 Family Problems 10814, 11385, 12041, 20300, 20817.
 Family (Sociological Unit) 10424, 10814, 23535.
 Federal Aid 20169, 20420.
 Films 10354.
 Filmstrips 10354.
 Financial Support 10721, 11385, 11992, 12041, 20171, 20803.
 Fly Test 10874.
 Followup Studies 10726, 20170, 21092, 21444.
 Games 10588, 23286.
 Genetics 11992.
 Great Britain 21444.
 Handicapped 10419, 10588.
 Handicapped Children 11992, 23286.
 Handicrafts 20475.
 Handwriting 20108.
 Health 11385.
 Health Services 20169, 20420.
 Hearing Loss 11452, 21787.
 Hohner Melodica 23168.
 Home Instruction 20171, 23019.
 Homebound 10565, 20191.
 Hospitalized Children 10814, 20191.
 Hospitals 10565.
 Hyperactivity 21092.
 Identification 10115, 10565, 10726, 11353, 11628, 20216, 20817, 21092, 21444.
 Illinois Test Of Psycholinguistic Abilities 10419, 21695.
 Incidence 10565, 11452, 20817, 23141.
 Individual Characteristics 10373, 10721, 10902, 11488, 11728, 21396.
 Individualized Instruction 11517, 20765.
 Infancy 10726, 10994.
 Infectious Diseases 10726.
 Injuries 11992.
 Inservice Education 20171.
 Institutions 10565.
 Instructional Materials 10005, 10354, 10588, 20803, 21396, 23286.
 Insurance Programs 11385.
 Intellectual Development 10424, 11752.
 Intelligence Level 22938.
 Intelligence Quotient 21493.
 Intelligence Tests 10097, 11576.
 Interdisciplinary Approach 11628, 20191, 20216.
 Kindergarten Children 10994.
 Language Ability 11751-11752, 21695.
 Language Arts 11454.
 Language Development 10005, 10115, 10412, 10994, 11454, 11517, 11751, 11830, 20817, 21788, 22785.
 Language Handicapped 11353.
 Language Handicaps 10097, 10419.
 Language Instruction 10412.
 Language Research 11830.
 Language Tests 11751.
 Lateral Dominance 10780, 21447.
 Learning 10959.
 Learning Activities 11113.
 Learning Characteristics 10959, 11113, 11353, 11488, 22214.
 Learning Difficulties 10412, 10419, 10814.
 Learning Disabilities 10373, 10412, 11029, 20170, 20765, 21092, 21447.
 Legislation 12041, 20170.
 Literature Reviews 23141.
 Lysergic Acid Diethylamide 11992.
 Manipulative Materials 10588.
 Marble Board Test 10874.
 Mathematics 11029.
 Medical Case Histories 20300, 23141.
 Medical Consultants 20171.
 Medical Evaluation 10115, 10354, 10565, 10726, 20216, 20300, 21447, 22410.
 Medical Research 10726, 11943, 11992, 20420.
 Medical Treatment 10097, 10373, 10565, 10726, 10975, 11628, 11943, 11992, 12063, 20216, 20300, 22410, 23141, 23535.
 Memory 10959, 22214.
 Mental Retardation 10097.
 Mentally Handicapped 10726, 10975, 11753, 11757, 12041, 20169, 20803, 21444, 21447, 22410.
 Minimally Brain Injured 10373, 10412, 10419, 10726, 20765, 21092, 21447, 22051, 22410.
 Mongolism 11992, 20765.
 Montessori Method 20765.
 Mothers 10726.
 Motivation Techniques 20765.
 Motor Development 21092, 22051, 22230, 22813, 22911, 23168.
 Motor Reactions 12047, 20475, 22214, 23043.
 Multiply Handicapped 10097, 10115, 10975, 11517, 11992, 20191, 20216, 21787-21788, 22977.
 Multisensory Learning 11517.
 Music 23168.
 National Programs 20169.
 Neurological Defects 21447, 22410, 23043.
 Neurologically Handicapped 10115, 10373, 10412, 10726, 10780, 10874, 10959, 11353, 11358, 11385, 11830, 11943, 20765, 20803, 20817, 22051.
 Neurology 10115, 10780, 21447, 22410, 22813, 23043.
 New Jersey 22938.
 New York 10005.
 Number Concepts 10005.
 Object Manipulation 11752.
 Occupational Therapy 10097, 11113, 20216, 22051, 23535.
 Occupations 23141.
 Older Adults 12041.
 Parent Attitudes 10097, 10424, 22938, 23141.
 Parent Counseling 10097, 10994, 11992, 20171, 20803, 22938.
 Parent Education 10097, 11757, 22230, 22785.
 Parent Role 10424, 21444, 22230, 22785, 23019.
 Parent School Relationship 11517.
 Parents 10424.
 Partially Sighted 20817.
 Pathology 10780.
 Perception 10005, 10874, 11358, 11488.
 Perception Tests 10874, 11358.
 Perceptual Development 10005, 11358.
 Perceptual Motor Coordination 10419, 10588, 11488, 21092, 23168.
 Perceptual Motor Learning 10780, 11029, 20803, 22813.
 Perceptually Handicapped 10412, 10874, 21092.
 Personal Care Homes 11385.
 Personality 10097, 11728.
 Personality Development 11728.
 Personality Problems 11488.
 Physical Activities 22230.
 Physical Development 10780, 10994, 11752, 22230.
 Physical Therapy 10097, 10115, 10780, 11113, 11517, 11628, 20216, 22051, 22813, 23535.
 Physically Handicapped 10005, 10058, 10097, 10115, 10354, 10412, 10419, 10424, 10565, 10588, 10721, 10780, 10814, 10874, 10902, 10959, 10975, 10994, 11029, 11113, 11353, 11358, 11385, 11452, 11454, 11488, 11517, 11576, 11628, 11728, 11751, 11753, 11757, 11830, 11943, 12041, 12063, 20108, 20169-20171, 20420, 20475, 20480, 20803, 21695, 21849, 22109, 22214, 22230, 22813, 22938, 23041, 23141, 23168, 23535.
 Physicians 10975.
 Physiology 10780, 22911.
 Placement 21444.
 Positive Reinforcement 21849.
 Predictive Validity 11753.
 Pregnancy 10726, 11943, 11992.
 Premature Infants 10726, 11992.
 Prenatal Influences 10726, 11943, 11992, 20171.
 Preschool Children 10975, 10994, 11628, 11752, 20216, 20765, 23286.
 Prevention 11992, 20170.
 Preventive Medicine 10565, 11943, 20420.
 Professional Education 20170.
 Professional Personnel 20803.
 Program Budgeting 20170.
 Program Descriptions 20169.
 Program Evaluation 10975, 21444, 21447.
 Program Planning 10565, 10975, 20170-20171.
 Programed Instruction 11029, 20169.
 Prostheses 12047, 20216.
 Psycholinguistics 21695.
 Psychological Characteristics 10412, 22911, 22938.
 Psychological Evaluation 10412, 20480, 20803, 21092, 23535.
 Psychological Needs 11757.
 Psychological Tests 20300, 20480.
 Psychologists 11628, 20480.
 Psychomotor Skills 10588, 11752, 20475, 22813.
 Public Relations 20170.
 Public Schools 11452.
 Questionnaires 23141.
 Rating Scales 11753.
 Reading Ability 21788.
 Recall (Psychological) 21787.

Records (Forms) 20803.
Recreation 10354, 11517, 11757.
Recreational Facilities 11113.
Referral 12041.
Reflex Therapy 22813.
Rehabilitation 11353.
Rehabilitation Programs 20216.
Reinforcement 20817.
Religious Education 11757.
Research Needs 10419, 20170.
Research Projects 20169, 23041.
Research Reviews (Publications) 10814, 11029.
Residential Care 11385, 20171, 20817.
Residential Programs 20169.
Residential Schools 11517.
Rewards 21849.
Rubella 11992, 20420.
Rural Areas 20170, 20191.
Scheduling 20803.
School Buildings 11113.
School Services 11113.
Self Actualization 11728.
Self Care Skills 10588, 10975, 20216.
Self Concept 10814, 11728, 20803.
Sensory Training 10005, 21447, 21493.
Sentence Structure 11454, 11830.
Sequential Learning 10959.
Services 10721, 20169, 21444.
Sex Differences 11454, 11830, 21493.
Sheltered Workshops 20171.
Skill Development 10588, 23141.
Social Adjustment 11488, 23535.
Social Development 10975, 11752, 22911.
Social Services 12041, 11385.
Social Work 10097.
Social Workers 11628.

Socioeconomic Status 23141.
Special Schools 22938.
Speech Evaluation 10115, 10412, 22785, 22911.
Speech Habits 11353, 22785.
Speech Handicapped 10115, 10780, 11353, 11576, 11753, 12047, 12063, 21493, 22911, 23043.
Speech Handicaps 10097, 10412, 23019.
Speech Improvement 21493.
Speech Tests 10902, 11576, 11753, 21493.
Speech Therapy 10115, 10412, 10780, 11113, 11353, 11517, 11628, 12063, 20216, 21493, 22785, 22813, 22911, 23019, 23043, 23535.
Staff Role 11517.
Standardized Tests 20480.
State Agencies 10419.
State Legislation 12041, 20169, 20171.
State Programs 12041, 20171.
State Surveys 22938, 23141.
Student Evaluation 10994, 11517.
Syracuse Visual Figure Background Test 10874.
Tactual Motor Test 10874.
Tactual Perception 10874, 11358.
Task Performance 22214.
Taxonomy 10721, 20216.
Teacher Attitudes 12063.
Teacher Role 10419, 11728.
Teaching Methods 10412, 10814, 10994, 11517, 20475, 20765, 20817, 21092, 21849, 23019.
Terman Merrill Intelligence Scale 10874.
Test Construction 11752.
Test Interpretation 10874, 10902,

20480.
Test Reliability 11753.
Test Validity 21695.
Testing 10874, 10902, 11358, 11488, 11576, 11751-11753, 20480, 21092, 21695.
Testing Problems 20480.
Texas 23141.
Theories 10373.
Therapeutic Environment 11517.
Therapy 21447, 22813.
Toys 10588, 23286.
Trainable Mentally Handicapped 10975.
Training Techniques 21493.
Transportation 20170, 20803.
Typewriting 21396.
Verbal Ability 11576, 11830.
Verbal Communication 10780.
Visual Learning 10959.
Visual Perception 10874.
Visual Stimuli 10959, 21493.
Visually Handicapped 10097, 11517, 20817.
Vocabulary 11454.
Vocabulary Development 21788.
Vocational Counseling 10097, 23041.
Vocational Education 10565.
Vocational Rehabilitation 10097, 10354, 10419, 10975, 20169, 20420, 23041.
Voice Disorders 23043.
Voluntary Agencies 12041.
Volunteers 20169, 20171.
Wechsler Intelligence Scale For Children 11576.
Welfare Services 11385, 20420.
Word Frequency 11454.