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## ABSTRACT

The selected bibliography of research on physically handicapped children, children with special health problems, and children with cerebral palsy contains approximately 100 abstracts and associated indexing information drawn from the computer file of abstracts representing the Council for Exceptional Children Information Center's complete holdings as of November, 1973. Abstracts are chosen using the criteria of availability of document to user, current applicability, information value, author reputation, and classical content. Preliminary information explains how to read the abstract (a sample abstract is included for identification of abstract parts), how to use the author and subject indexes, how to purchase documents through the Educational Resources Information Center Document Reproduction Service (three order blanks are provided), and how to order "Exceptional Child Education Abstracts" (an order blank is provided), in which the abstracts are originally published. Also, front information includes a list of terms searched to compile the bibliography and a list of journals from which articles are abstracted for the bibliography. Publication dates of documents abstracted range from 1963 through 1973. (MC)

ED 085920

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# PHYSICALLY HANDICAPPED/SPECIAL HEALTH PROBLEMS/CEREBRAL PALSY RESEARCH

A Selective Bibliography

November, 1973

CEC Information Center on Exceptional Children  
An ERIC Clearinghouse  
The Council for Exceptional Children  
1920 Association Drive  
Reston, Virginia 22091

Exceptional Child Bibliography Series No. 655

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.

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# 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 Special Education IMC/RMC Network. In addition, the CEC Center's program includes a commitment to a concentrated effort towards the development of products which will interpret research results into educational methods and practices.

## How to Use This Bibliography

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

Selective editing by Information Specialists is performed on each bibliography. From the total number of abstracts drawn from the file on a particular topic, selection is made of only those judged to best meet the following criteria: availability of the document to the user, currency, information value, author's reputation, and classical content. The number of abstracts selected to appear in a bibliography may vary from one to 100, depending on the amount of suitable information available. Updating of bibliographies as new material becomes available is accomplished when the volume of new material reaches 25 percent of presently available material on a given topic.

## 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

Documents with an ED number and EDRS availability indicated may be purchased from the ERIC Document Reproduction Service (EDRS). For your convenience an order form is provided on the back cover of this bibliography.

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Sample Abstract Entry

Clearinghouse accession number → EC 01 0769

Publication date → Publ. Date Jun 68

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

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

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

Abstract number used in Indexes → ABSTRACT 769

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

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

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

Contract or grant number → VRA-546T66

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

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

Abstractor's initials → (MK)

\*NOTE: EDRS mf indicates microfiche reproduction only.

## INDEXING TERMS SEARCHED

Indexing terms used to retrieve information on *Physically Handicapped, Special Health Problems, and Cerebral Palsy-Research* from the Center's computer file of abstracts are listed alphabetically below:

Allergy  
Amputees  
Asthma  
Cardiac (Person)  
Cerebral Palsy  
Cosmetic Prostheses  
Crippled Children  
Diabetes  
Epilepsy  
Exceptional Child Research  
Orthopedically Handicapped  
Physical Handicaps  
Physical Therapy  
Physically Handicapped  
Prostheses  
Quadriplegia  
Seizures  
Special Health Problems

## JOURNALS USED

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

*American Journal of Diseases of Children*, 535 N. Dearborn Street, Chicago, Ill. 60610

*Exceptional Children*, Council for Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

*Journal of Mental Deficiency Research*, 86 Newman Street, London, W.I., England

*Journal of Pediatrics*, 11830 Westline Industrial Drive, St. Louis, Mo. 63141

*Journal of Special Education*, 3515 Woodhaven Road, Philadelphia, Pa. 19154

*Mental Retardation*, 49 Sheridan Avenue, Albany, N.Y. 12210

*Pediatrics*, American Academy of Pediatrics, Evanston, Ill. 60204

*Rehabilitation Literature*, National Easter Seal Society for Crippled Children and Adults, 2023 West Ogden Avenue, Chicago, Ill. 60612

*Rehabilitation Record*, Government Printing Office, Washington, D.C. 20402

The abstracts in this bibliography were selected from *Exceptional Child Education Abstracts*, Volumes I-V, No. 1.

## ABSTRACTS

### ABSTRACT 10058

EC 01 0058 ED 014 821  
 Publ. Date 28 Feb 66 31p.  
 Mc Cann, Cairhre  
**Development and Evaluation of Adaptive Communication Devices for the Severely Handicapped Child.**  
 Crotched 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 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 10063

EC 01 0063 ED 011 708  
 Publ. Date Jan 64 100 p.  
 Fishman, Sidney; Kay, Hector W.  
**Acceptability of a Functional-Cosmetic Artificial Hand for Young Children (Child Prosthetic Studies).**  
 New York Univ., New York, Coll. of Engineering  
 EDRS mf.hc

Descriptors: exceptional child research; physically handicapped; cosmetic prostheses; amputees; children; prostheses; New York City; APRL Sierra Child Size Model Number 1 Hand; Dorrance Number 10X Hook

Seventy-seven children, aged 4 to 12-4 and all levels of upper extremity amputation (prosthetic type) from wrist-- disarticulation to shoulder-disarticulation, wore

the APRL-- Sierra Child Size Model Number 1 Hand for approximately 4 months. Child and parents made clinic visits for initial screening, fitting, 2 months post-fitting evaluation, and final evaluation. Twenty-one children wanted to wear the hand exclusively, 21 desired it for most activities, seven children preferred it about equally to a hook, eight children and parents disagreed in primary choice, 13 preferred the hook, and seven rejected the hand completely. When compared to the equivalent Dorrance Hook, the Number 1 hand provided less total function but equal function for numerous activities, and superior function for some children on certain tasks. The hand helped the child's self confidence and acceptance by peers and teachers. Prescription of the hand was recommended for appropriate size and amputation levels. The authors need was to reduce the amount of breakage of the hand and to provide a more durable glove. A hook was suggested as a spare or play device when prescription for the hand is made. Appendixes include data-gathering questionnaires and a chart of hand malfunctions. A six-item bibliography is included. (MY)

### ABSTRACT 10086

EC 01 0086 ED 011 731  
 Publ. Date Dec 65 76p.  
 Force, Dewey G., Jr.  
**A Descriptive Study of the Incidence of Seizures and Teachers' Attitudes toward Children with Epilepsy in the Minneapolis, Minnesota, Public Schools.**  
 Minnesota Epilepsy League, St. Paul  
 EDRS mf.hc

Descriptors: exceptional child research; special health problems; epilepsy; seizures; teacher attitudes; incidence; neurologically handicapped; neurological defects; children; questionnaires; attitudes; negative attitudes; stereotypes; St Paul

This study was designed to determine the incidence of seizures among children in a public school system and teachers knowledge and attitudes about epileptic children. Of 70,342 children in Minneapolis Public Schools in September 1963, 318 (a rate of 4.52 per 1,000) had a medical diagnosis of seizures. Fifty-six percent of these were boys and 44 percent were girls. Teachers in 16 elementary schools and five secondary schools responded to a 12-item questionnaire designed to determine teachers knowledge about seizures, their exposure to children with seizures, and their attitudes toward epilepsy and epileptic children. Results showed that epilepsy among school children is more frequent than supposed, that stereotypes and misconceptions about epilepsy and epileptics exist, that knowledge of teachers about epilepsy is

often sketchy, and that teachers attitudes toward these children are highly variable and often not based on modern medical and psychological knowledge. (JA)

### ABSTRACT 10701

EC 01 0701 ED N.A.  
 Publ. Date Apr 67 7p.  
 Swack, Myron J.

**Training Special Education Teachers in Physical Therapy Techniques by Means of Programed Demonstrations.**  
 Eastern Michigan University, Ypsilanti  
 EDRS not available  
 Exceptional Children; V33 N8 P529-35  
 Apr 1967

Article Based on the Author's Doctoral Dissertation. The University of Michigan.

Descriptors: exceptional child research; physically handicapped; programed instruction; teacher education; physical therapy; orthopedically handicapped; student teachers; prostheses

A study was designed to evaluate a method for coordinating efforts of the physical therapist and the orthopedic classroom teacher in two areas: inspection of therapeutic equipment and methods of facilitating locomotion. The method consisted of programed demonstrations and forced choice discrimination tasks given to 20 student teachers in two groups. One group received instruction in methods of inspection and adjustment of therapeutic equipment. The other group received instruction in facilitation of locomotion of physically handicapped children. Observers evaluated both groups on classroom use of the instruction. The inspection group had a significantly higher (p equals .05) incidence of inspecting and adjusting behavior than did the locomotion group which did not receive this type of training. The methods of locomotion program did not produce the expected changes in the classroom. However, there was a significant difference in behavior between the two groups of training. (SB)

### ABSTRACT 10704

EC 01 0704 ED N.A.  
 Publ. Date Apr 67 8p.  
 Brieland, Donald

**A Followup Study of Orthopedically Handicapped High School Graduates.**  
 Chicago University, Illinois, the School of Social Service Administration  
 EDRS not available  
 Exceptional Children; V33 N8 P555-62  
 Apr 1967

Descriptors: exceptional child research; physically handicapped; attitudes; marriage; speech; followup studies; orthopedically handicapped; adults; high school graduates; hospital schools; social relations; self concept; employment level; educational background



In this followup study, 41 orthopedically handicapped graduates of the Illinois Children's Hospital School (aged 12 to 39 years) were interviewed and their hospital school records were examined. More than one-half were postpolio or paraplegic cases. Interviewers using four schedules focused on hospital school attitudes, social participation, employment, and life satisfaction. Their judgments related to past educational programs were solicited. The following results are reported: the group showed an employment rate of 46%; a significantly higher employment rate was noted among women than among men (p less than .05); 24% had married; self rating of degree of handicap was significantly related to the level of social participation (p less than .05); a significant relationship was found between intelligence and further education (p less than .01); speech and ambulation showed neither improvement nor regression in most of the subjects; significant associations were found between well being and social contacts outside the family (p less than .01), hobbies (p less than .01), and past high school education and IQ scores (p less than .05); the longer the individual had been at the hospital school the less favorable was his attitude toward it and the less he tended to want to leave it; attitudes toward social services centered on concern about confidentiality; and most students' suggestions for the school program involved more independence and freedom. (SB)

**ABSTRACT 10918**

EC 01 0918 ED 026 761  
 Publ. Date 65 79p.  
 Robb, Preston

**Epilepsy: A Review of Basic and Clinical Research. NINDB Monograph Number 1.**

National Institute of Neurological Diseases and Blindness (DHEW). Washington, D. C.  
 EDRS mf  
 PHS-PUB-1357  
 Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (\$0.45).

Descriptors: exceptional child research; special health problems; epilepsy; neurologically handicapped; incidence; etiology; genetics; infectious diseases; biochemistry; seizures; classification; clinical diagnosis; pathology; medical treatment; research reviews (publications); medical research

A discussion of the incidence of epilepsy is followed by a discussion of etiology including the following causes: genetic and birth factors, infectious diseases, toxic factors, trauma or physical agents, hereditary and degenerative disorders, circulatory disturbances, metabolic and nutritional disturbances, and neoplasms. Epileptic seizures are classified by symptoms, duration, precipitating factors, postictal phenomena, behavioral disorders associated with epilepsy, and related paroxysmal disorders; patterns of attack are described. Diagnosis and pathology are considered along with treatment by anticonvulsant drugs (available drugs are listed), dietary and surgical

treatment, indications and results of surgery, and prognosis. References follow each chapter. (JM)

**ABSTRACT 10919**

EC 01 0919 ED 026 762  
 Publ. Date 65 534p.  
 Barbe, Walter B.

**Psychology and Education of the Gifted: Selected Readings.**

EDRS not available  
 Appleton-Century-Crofts, 440 Park Avenue South, New York, New York 10016 (\$4.50).

Descriptors: exceptional child education; gifted; administration; environmental influences; individual characteristics; achievement; identification; educational strategies; intelligence factors; family (sociological unit); learning characteristics; creativity; attitudes; experimental programs; acceleration; advanced placement; early admission; enrichment programs; grouping (instructional purposes)

An overview of educational and psychological literature concerning the gifted is presented in 55 papers with editorial comments. The historical development of the study of the gifted and cultural attitudes are first considered. Discussions of the effectiveness of various screening methods for identifying the gifted include evaluation of creative, social, and other nonintellectual factors; suggestions are given for providing an optimal environment. Theories are discussed about hereditary and environmental influences on mental ability with ideas for conserving and increasing our supply of superior mental talent. Writings on the characteristics of eminent scientists, unstable geniuses, superior college students, and younger gifted children are included in a consideration of the gifted individual's intellectual, social, and emotional characteristics. Special programs to help develop and encourage giftedness, such as acceleration, enrichment, and homogeneous grouping are described and evaluated; current issues and needed research are considered; and teacher qualities judged effective in aiding creative growth are discussed. (RM)

**ABSTRACT 10937**

EC 01 0937 ED 026 781  
 Publ. Date 68 22p.

**Adapted Physical Education Program. 1968 Report.**

Pittsburgh Public Schools, Pennsylvania, Office of Research  
 EDRS mf, hc

Descriptors: exceptional child research; physically handicapped; special health problems; physical education; remedial programs; physical fitness; individualized instruction; teacher qualifications; rating scales; etiology; program evaluation; administration; clinical diagnosis; staff role; special classes

A program was introduced in 1965 to provide individualized physical education for students in grades 1 through 12 who could not participate in regular physical education programs. Twenty-one schools and 1,640 students with a variety of conditions participated. The most frequent

limitations of participants were low physical fitness, overweight, and curvature of the spine. Pupils attended an average of two 45-minute classes a week where they engaged in regular physical education activities adapted to their specific needs. Measurement of program effectiveness revealed that although the number of schools having the program increased, the number of students served decreased, and there was no difference in improvement of students with low physical fitness related to whether they had one, two, or five classes per week. Instructors estimated that 30% of participants reached maximum improvement, 44% showed moderate improvement, 17% minimal improvement, and 9% no improvement. Of the students, 16% were returned to regular physical education classes. Administrative considerations are included. (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: VI 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; programmed 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 programmed instruction discussed are that it lessens learning time, increases length of information retention, and better 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 programmed 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, programmed instruction was equal to the conventional method, and the most handicapped benefited the most from the programmed instruction. Refinement of the programmed instruction course, with more series of stages, is recommended. (SB)

**ABSTRACT 11481**

EC 01 1481 ED N.A.  
 Publ. Date 67 9p.  
 Money, John; Drash, Philip W.

**Juvenile Thyrotoxicosis: Symptoms and Antecedents Leading to Referral and Diagnosis.**

EDRS not available

Journal of Special Education: V2 N1 P83-91 Fall 1967

Descriptors: exceptional child research; medical research; physical characteristics; psychological characteristics; behavior change; identification; incidence; age differences; special health problems; behavior problems; etiology; heredity; thyrotoxicosis; hyperthyroidism

Twenty-three cases (four male, 19 female) of juvenile and early adolescent thyrotoxicosis (hyperthyroidism) seen at Johns Hopkins from 1954 to 1964 were analyzed for behavioral and psychological data. Age at onset of symptoms ranged from 2-10 to 14-7 with a mean of 9.5 years. Nine patients became thyrotoxic at puberty, indicating a greater vulnerability at this time. Interviews were conducted with the patient and with a close relative, usually the mother. Eleven somatic and 15 behavioral symptoms were identified. The most common somatic symptoms were protrusion of the eyes, enlargement of the throat, weight loss, and excessive perspiration; the most common behavioral symptoms were hyperkinesis (nervous, fidgety), decline in school work, irritability and proneness to being upset, and restless and disturbed sleep. The symptoms occurred in combination with no consistent patterns; behavioral symptoms were reported more often in older children. Following the treatment, five patients reported no significant change even though their symptoms may have lessened, a few had somatic changes only, and the majority showed behavioral improvement. The clinical evidence supported a hypothesis of genetic predisposition to thyrotoxicosis, with 10 of the cases having near relatives with goiter histories. There was little evidence for psychic or somatic stress as a precipitating factor. (LE)

**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 20337**

EC 02 0337

ED N.A.

Publ. Date Sep 69

4p.

Shepherd, Clyde W., Jr.

**Childhood Chronic Illness and Visual Motor Perceptual Development.**

EDRS not available

Exceptional Children: V36 N1 P39-42 Sept 1969

Descriptors: exceptional child research; special health problems; perceptual development; perceptual motor coordination; visual perception; intelligence; reading achievement

The visual motor perceptual development of 47 second grade children having a history of chronic illness was investigated. Relationships between factors associated with the chronic illness and visual perceptual development are cited and discussed. The results suggest that children having a history of chronic illness perform significantly below expected levels on visual motor tasks and experience early reading difficulty. (Author)

**ABSTRACT 20599**

EC 02 0599

ED 011 929

Publ. Date 66

45p.

**Vocational Education for Persons with Special Needs.**

California State Department of Education, Sacramento, Vocational Education Section

EDRS mf.hc

Descriptors: exceptional child research; vocational education; educational needs; dropout identification; low ability students; dropout prevention; mentally handicapped; middle aged; older adults; socioeconomic status; continuation education; emotionally disturbed; delinquents; minority groups; underachievers; physically handicapped; small schools; employment opportunities; disadvantaged youth

A survey of research was made to identify the vocational needs of individuals with special problems. Completed studies, research-in-progress, and current proposals were included. Topics covered in this summary are aging, continuation education, the culturally deprived, delinquency, dropouts, emotional disturbance, low ability, mental retardation, minority racial groups, physically handicapped students, small schools, socioeconomic studies, underachievers, and work opportunities. A bibliography is included. (MS)

**ABSTRACT 20603**

EC 02 0603

ED 011 388

Publ. Date Jan 67

19p.

Barry, John R. and Others

**Personality and Motivation in Rehabilitation.**

EDRS mf.hc

Descriptors: exceptional child research; personality; vocational rehabilitation; motivation; physically handicapped; psychological evaluation; rehabilitation; self concept; followup studies; social attitudes; work attitudes; Veterans Administration Center (Bay Fines, Florida)

The attempt to discover some psychological referents to establish ratings of patient motivation for recovery and return to work is described. Criterion ratings of this motivation, based upon followup data, were compared with a variety of psychological assessment data obtained a year before the criterion data were collected. Strong patient motivation for recovery and return to work was associated with favorable attitudes toward self, with a small discrepancy between ratings of real and ideal self, with intelligence, with attitudes of social restraint, and with an interest in people and in getting along with them. (Author)

**ABSTRACT 20856**

EC 02 0856

ED 028 551

Publ. Date 15 Aug 62

108p.

Schmidt, Paul and Others

**Work Adjustment Program for Disabled Persons with Emotional Problems. Final Report.**

Indianapolis Goodwill Industries, Indiana

Office of Vocational Rehabilitation (DHEW), Washington, D. C.

EDRS mf.hc

DP-RD-275

Descriptors: exceptional child research; multiply handicapped; vocational rehabilitation; job placement; followup studies; demonstration projects; administration; supervisors, mentally handicapped; emotionally disturbed; physically handicapped; epilepsy; clinical diagnosis; vocational counseling; adjustment (to environment); vocational adjustment; personal adjustment; evaluation; workshops; behavior rating scales; sheltered workshops; Goodwill Industries

A 4-year demonstration project at Indianapolis Goodwill Industries applied work adjustment knowledge, methods, and techniques to assist 200 clients, ages 17 to 58 years, mean IQ 90, who were severely disabled with handicaps including mental retardation, epilepsy, emotional disturbances, and/or physical handicaps. After a diagnostic evaluation clients were assigned to a job; supervisors, caseworkers, and psychologists provided support or criticism directed toward shaping work attitudes and helping the person see himself realistically. Evaluation techniques considered interpersonal relations, utilization of ability, work satisfaction, adjustment to work pressure, and self concept as a worker. Supervisors and other staff members also rated workers for employability and placeability; followup studies were done. Of the 159 clients who completed the program, 129 were placed on jobs. Conclusions were that techniques used in the project were practical and effective for the majority of clients and that clients tended to show better adjustment. Administrative problems, the role of supervisors, and implications for the future are discussed; six case histories, 29 tables of information about clients, and 11 forms and rating scales are included. (RK)



**ABSTRACT 20859**

EC 02 0859 ED 028 555  
 Publ. Date Oct 68 499p.  
**Special Education Diagnostic and Resource Center Project, 1967-68. ESEA Title III Evaluation Report.**  
 Wichita Unified School District 259, Kansas  
 Office of Education (DHEW), Washington, D. C.  
 EDRS mf. hc  
 P-66-1090

Descriptors: exceptional child research; student evaluation; special classes; ancillary services; resource centers; emotionally disturbed; learning disabilities; aurally handicapped; mentally handicapped; physically handicapped; underachievers; case studies (education); testing; community programs; cooperative programs; professional personnel; program evaluation; Wichita; Kansas; Elementary and Secondary Education Act Title III Project

The project provided for the second year of operation of a special education diagnostic and resource center, special classes, and supportive services for handicapped children and youth between the ages of 3 and 21. Cooperation was obtained from existing community agencies, participating school districts, and local private practitioners. Center staff included coordinators, psychologists, social workers, a librarian for the visually handicapped, a peripatologist, and consultants in art, music, and physical education. The supplementary classroom program provided placement in the following categories: learning disabilities, hearing handicapped, severely orthopedically handicapped, trainable mentally handicapped, emotionally disturbed, and Negro underachievers. Counseling services for parents, consultative services for supplementary or regular classrooms, resource materials and equipment, and materials and equipment for the visually handicapped and blind were also provided. Both test and non-test sources of data were used to evaluate the project; teacher ratings and consultant reports indicated that most of the pupils were improving in attitudes, skill areas, and group functioning. Of the 131 pupils served in supplementary classrooms, 28 were returned to regular class programs. Teaching methods are reported in case studies. (LE)

**ABSTRACT 20866**

EC 02 0866 ED N.A.  
 Publ. Date 68 332p.  
 Jordan, John E.  
**Attitudes toward Education and Physically Disabled Persons in Eleven Nations.**  
 Michigan State University, East Lansing, Latin American Studies Center  
 Office of Education (DHEW), Washington, D. C., Cooperative Research Branch  
 EDRS mf  
 CRP-5-8348-2-12-1  
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 Latin American Studies Center, Michigan State University, East Lansing, Michigan 48823 (Hc \$10.00).

Descriptors: exceptional child research; attitudes; physically handicapped; foreign countries; education; teacher attitudes; special education teachers; administrator attitudes; professional personnel; managerial occupations; laborers; sex differences; values; religious factors; group membership; socioeconomic influences; rating scales; cultural factors; educational attitudes

The Attitudes Toward Disabled Persons Scale was used to measure the attitudes of special education and rehabilitation workers, elementary and secondary teachers, managers and executives, and laborers from 11 nations toward the physically disabled or handicapped and toward education. Hypotheses based on Kerlinger's theoretical model were investigated: traditionalism, or a conservative-traditional approach to educational issues emphasizing subject matter for its own sake, external discipline, and maintenance of the status quo; and progressivism, emphasizing the problem solving approach, internal discipline, liberal social beliefs, and education as an instrument for change. Attitudes were related to values, sex, contact with disabled persons, enjoyment of contact, change orientation, institutional satisfaction, religiosity, group membership, modernization, and multidimensionality. Results are summarized; 69 tables present data. (RP)

**ABSTRACT 20922**

EC 02 0922 ED 027 653  
 Publ. Date Apr 63 74p.  
 Rusk, Howard A. and Others  
**Specialized Placement of Quadriplegics and Other Severely Disabled. Final Report.**  
 New York University, New York, Institute for Physical Medicine and Rehabilitation  
 Vocational Rehabilitation Administration (DHEW), Washington, D. C.  
 EDRS mf. hc  
 VRA-RD-509

Descriptors: exceptional child research; physically handicapped; vocational adjustment; vocational rehabilitation; medical services; special services; group counseling; occupational surveys; job placement; orthopedically handicapped; demonstration projects; employment services; counseling services; employment experience; adults; statistical surveys; quadriplegia

To help quadriplegics and other severely disabled achieve vocational placement and confront the catastrophic impact of quadriplegia on bodily function (as detailed in the report), a rehabilitation team provided medical, various special, and vocational rehabilitation services. The 100 clients (59% men, 79% less than 45 years and 62% between 20 and 39) were evaluated for physical capacities and job-task performance. Of the 100, 62 received and completed intensive training services, including vocational adjustment training, psychosocial services, and group counseling. Various job placement

and promotion techniques were utilized. Of these 62, 25 were quadriplegics, 23 of whom were placed in gainful employment. Of the remaining 37 who had various degrees of severe disability, 30 were placed. Also part of the project was a mail survey made to determine the current employment experience of the quadriplegic. Of 355 persons contacted, 177 responded, of whom 69 were employed and 18 were attending college. Further descriptive data, six case studies, four recommendations, and 12 references are included. (JD)

**ABSTRACT 21311**

EC 02 1311 ED 025 226  
 Publ. Date Feb 68 11p.  
 Semmel, Melvyn I.  
**Connotative Meaning of Disability Labels Under Standard and Ambiguous Test Conditions.**  
 Michigan University, Ann Arbor, Center for Research On Language and Language Behavior  
 Office of Education (DHEW), Washington, D. C., Bureau of Research  
 OEC-3-5-061784-0508  
 EDRS, mf. hc  
 BR-6-1784  
 Submitted to USOE As One of the Studies in Language and Language Behavior, Progress Report VI, February 1, 1968.

Descriptors: exceptional child research; handicapped children; attitudes; stereotypes; rating scales; testing; mentally handicapped; physically handicapped

At the George Peabody College for Teachers, Nashville, Tennessee, 50 male students responded to a questionnaire concerning their reactions to individuals having mental or physical disabilities, to persons of another race, and to gifted persons. The 20 questions (scale items) focused on association with 12 types of disabled persons (disability labels). The test was designed to explore connotative reactions to different disability labels when personal involvement is implied, and was administered under standard and ambiguous testing conditions. In the ambiguous condition, the questionnaire minus the scale items was used and the students were asked to repeat their original responses from memory. Disability labels used were: epileptic, mentally retarded, blind, cerebral palsied, gifted, Negro, crippled, emotionally disturbed, deaf, amputee, normal, and stuttered. Although not considered disability labels, gifted and Negro were included for separate interpretations of sub-scale and total scale scores. The 20 items ranged from questions as to how the person would feel about talking in public with each of the persons listed to how they would feel about marrying each of the persons listed. Answers were made along a 5-point comfort-discomfort continuum to which weights (1 through 5 for intensity of feeling) were assigned. The results confirmed the hypothesis that connotative meanings are commonly assigned to mentally and physically handicapped persons by non-disabled groups in our society, and that this attitude is extended to members of racial minorities. (WM)

**ABSTRACT 21339**

EC 02 1339 ED N.A.  
 Publ. Date Feb 70 159p.  
 Katz, Alfred H.

**Hemophilia: A Study in Hope and Reality.**

EDRS not available  
 Charles C Thomas, Publisher, 301-327  
 East Lawrence Avenue, Springfield, Illi-  
 nois 62703 (\$9.00).

Descriptors: heredity; cardiovascular system; social characteristics; employment; vocational counseling; self concept; leisure time; blood circulation; medical treatment; special health problems; incidence; males; family relationship; national surveys; parent role; emotional adjustment; employment problems; Hemophilia

The social and psychological problems of hemophilia are the focus of the text on this hereditary, chronic disorder which affects some 60,000 persons in the following: medical aspects, personal and social characteristics of hemophiliacs, family involvement, education, employment, special conditions related to working or finding jobs, vocational counseling and placement, leisure time activities, self concept, and conclusions. (RJ)

**ABSTRACT 21448**

EC 02 1448 ED 034 327  
 Publ. Date Nov 67 106p.  
 Siller, Jerome and Others

**Studies in Reaction to Disability. XII: Structure of Attitudes Toward the Physically Disabled; Disability Factor Scales--Amputation, Blindness, Cosmetic Conditions.**

New York University, New York, School of Education  
 Social and Rehabilitation Service (DHEW), Washington, D. C., Division of Research and Demonstration Grants  
 EDRS mf,he

Descriptors: exceptional child research; physically handicapped; attitudes; negative attitudes; amputees; blind; demography; factor analysis; attitude tests; stereotypes; test construction; internal scaling; item analysis

To describe and to develop instruments to measure attitudes toward amputees, the blind, and those with cosmetic conditions, three groups of subjects responded to one of three large pools of items tapping attitudes toward the three disability conditions. Three new groups of about 500 subjects of diverse demographic characteristics were given one of three revised and reduced questionnaires. The returns were factor analyzed and scales were derived from the resulting factors. The seven virtually identical factors which emerged from the amputation and blindness analysis were interaction strain, rejection of intimacy, generalized rejection, authoritarian virtuosity, inferred emotional consequences, distressed identification, and imputed functional limitations. The cosmetic conditions item set contained two factors which were identical (interaction strain, rejection of intimacy); two which were analogous (reluctant aversion and super-

ficial empathy); and two unique dimensions (qualified aversion and proximate offensiveness). A review of related research and data on each item of the scales are included. (L.E)

**ABSTRACT 21469**

EC 02 1469 ED 034 347  
 Publ. Date 28 Jul 69 144p.  
 Diller, Leonard and Others

**Psychological and Educational Studies with Spina Bifida Children. Final Report.**

New York University Medical Center, New York, Institute of Rehabilitation Medicine

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

EDRS mf,he  
 OEG-32-42-8145-5020  
 BR-5-0412

Descriptors: exceptional child research; physically handicapped; academic achievement; personality; intelligence; reading achievement; arithmetic; amputees; psycholinguistics; intelligence differences; individual characteristics; prostheses; social factors; student placement

To measure school achievements in spina bifida children, to relate these measures to certain variables, to obtain information on educational problems, and to study facets of cognition and its changes with age, 77 spina bifida children and 53 amputees (all aged 5 to 15) were tested. Sixty non-disabled children were at times used for controls. The findings indicated that children with spina bifida and hydrocephalus lagged behind other handicapped children in reading, arithmetic, psycholinguistic abilities, richness of interpersonal recall, and listing of occupations. The spina bifida hydrocephalic children showed better performance in verbal ability than in performance skills and tended to act socially deprived regardless of verbal intelligence. Non-hydrocephalic and amputee children seemed to show normal social awareness. Indications are that spina bifida children need earlier attention to avoid misplacement in academic levels and to help prevent cognitive and academic problems. Extensive appendixes and tables are provided. (Author/JM)

**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,he  
 OEG-0-9-522043-232h(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 22027**

EC 02 2027 ED 036 040  
 Publ. Date Dec 67 26p.

**The Modification of Educational Equipment and Curricula for Maximum Utilization by Physically Disabled Students. Final Report.**

Human Resources Center, Albertson, New York

Office of Education (DHEW), Washington, D. C., Bureau of Research  
 EDRS mf,he  
 OEG-2644  
 BR-5-0410-4-11-3

Descriptors: exceptional child research; physically handicapped; educational research; educational needs; curriculum development; personnel selection; program evaluation; transportation; school design; educational equipment; research reviews (publications); educational programs

To provide information on educational modifications for physically disabled children, a review of over 800 documents was evaluated, extensive interviews were conducted, and correspondence was gathered. The information was compiled and evaluated by the Human Resources Center and presented in five monographs dealing with school design, educational equipment, transportation, staffing, and curriculum and instructional techniques for physically disabled students. Each discussion presents problems and suggests solutions. The conclusions of the total project were that dissemination of this collated information can result in better educational techniques; there is much creative thinking currently, but

lack of communication hampers adoption of new techniques; and more surveys of information are needed concerning individual exceptionalities. Summaries of the monographs are provided. (JM)

#### 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; memory; 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 22556

EC 02 2556 ED N.A.  
Publ. Date May 70 5p.  
Masland, Richard L.  
**The Promise of the Future in Relation to the Crippling of Man.**  
EDRS not available  
Rehabilitation Literature: V31 N5 P130-4  
May 1970

Descriptors: exceptional child research; physically handicapped; medical research; crippled children; prevention; progress reporting

The article briefly discusses modern medical advances and the hopes for the future of prevention. Described are medical costs, the problems of immunization, slow viruses, metabolic defects, and cardiovascular diseases, the need to restore function for the physically handicapped, and the need for more research funds. (JM)

#### ABSTRACT 22765

EC 02 2765 ED 010 839  
Publ. Date Dec 66 42p.  
Coss, Joe Glenn and Others  
**Effectiveness of Automated Visual Programed Instruction with Paraplegic and Other Severely Handicapped Students.**  
Downey Unified School District, California  
Office of Education (DHEW), Washington, D. C.  
EDRS mf,hc  
OEG-31-14-00410-5016  
BR-5-0411

Descriptors: exceptional child research; teaching machines; physically handicapped; arithmetic; programed instruction; adolescents

Twenty eight severely physically handicapped patients (ages 12 to 21 years) participated in a study of the effectiveness of automated visual programed instruction. They were divided into four groups matched for reading level and intelligence, and were given one of three treat-

ment modes: alternation between teaching machines and classroom, classroom only, and teaching machines only. Results showed that teaching machines were about two thirds more efficient in time, were most effective in combination with classroom teaching, and were most effective with subjects of lower intelligence. Classroom instruction became more effective as instructional material became more difficult, and machines could be adapted for various disabilities. (Author/RJ)

#### 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 23244

EC 02 3244 ED 010 896  
Publ. Date Dec 64 73p.  
Kinnane, John F.; Suziedelis, Antanas  
**Sources of Interpersonal Anxiety in the Physically Handicapped.**  
Catholic University of America, Washington, D. C.  
EDRS mf,hc

Descriptors: exceptional child research; adjustment (to environment); attitudes; tests; personality; special health problems; visually handicapped; aurally handicapped; anxiety; physically handicapped; test construction; occupational levels; age; interpersonal relationship; cardiac (person); social adjustment; interpersonal problems; psychological evaluation; psychological tests; Schedule of Interpersonal Concerns

In order to measure the sources of interpersonal concerns among the physically handicapped, the Schedule of Interpersonal Concerns was developed, based on Schulz's three-dimensional model. The instrument contained 59 items divided into five factors: rejection, responsibility, personal intrusion, social enmeshment, and independence. Three groups of the physically handicapped were chosen for application of the instrument. The two groups with sensory handicaps, including 56 deaf and 42 blind, were predicted to



show concern over rejection. The third group of 38 cardiovascular handicapped was expected to show concern over the control dimension of independence. Control samples of 71 normal people were matched to each of the handicapped groups. Data analysis showed significant support of the hypotheses, despite some limitations of the instrument or sampling procedures with the deaf. Intragroup analysis indicated that the psychological meanings of a physical handicap were related to life stages and occupational levels. (NS)

#### ABSTRACT 30011

EC 03 0011 ED 042 318  
Publ. Date Jun 68 198p.  
Riley, Olga M.

#### Vocational Readiness for Young Disabled Students in New York City: Final Report of a 5-Year Collaborative Study.

State University of New York, Albany, State Education Department Rehabilitation Services Administration (DHEW), Washington, D. C.  
EDRS mf, hc

Descriptors: exceptional child research; vocational education; prevocational education; vocational rehabilitation; employment potential; physically handicapped; educable mentally handicapped; emotionally disturbed; adolescents

To determine if severely handicapped children were in fact not ready to utilize vocational services when they leave school (due to lack of prevocational work experience), handicapped children were provided two years of vocational counseling and sheltered work experience. The sample of 280 children (ages 14 to 17 years), were divided into experimental (Es) and control (Cs) groups in each disability grouping (physically handicapped, educable mentally handicapped, and emotionally disturbed). The Es received vocational service two days a week for two years. All children were assessed before and after the program and 12 months later. Results showed that the physically handicapped Es had higher potential for service than the physically handicapped Cs. The physically handicapped benefited the most from the program. The mentally handicapped showed gains in socialization and interpersonal adjustment, though not much gain in employability. The emotionally disturbed showed no significant benefits. Ethnic and socioeconomic factors were important determiners of progress (the prevocational service was least effective with children facing problems of the poverty subculture), and more integration with the child's educational program is recommended. Appendixes include forms, case histories, many tables, and additional information. (KW)

#### ABSTRACT 30358

EC 03 0358 ED N.A.  
Publ. Date 69 672p.  
Swinyard, Chester A., Ed.

#### Limb Development and Deformity: Problems of Evaluation and Rehabilitation.

EDRS not available  
Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$19.25).

Descriptors: exceptional child research; physically handicapped; anomalies; genetics; incidence; medical research; embryology; medical treatment; prostheses; emotional problems; limb deformities; thalidomide

Fifty-three authors have contributed articles related to limb deformities as a congenital malformation. Theoretical and practical concepts of genetic and environmental factors, and effects and treatment of limb deformities, are covered. Major divisions of articles discuss normal limb development, experimental embryogenesis, genetic and exogenous induction of limb deformities, and epidemiological studies. Also surveyed are biochemistry and metabolism as related to thalidomide, and morphological variations in thalidomide-related defects. Orthopedic and prosthetic considerations are enumerated, and psycho-social problems and parental counseling explored. Other articles deal with postnatal growth of the extremities and related surgical problems. Problems and progress in the development of an international terminology, and a bibliography on micromelia are appended. (KW)

#### ABSTRACT 30471

EC 03 0471 ED N.A.  
Publ. Date Nov 70 9p.  
Fassler, Joan

#### Performance of Cerebral Palsied Children Under Conditions of Reduced Auditory Input.

EDRS not available  
Exceptional Children: V37 N3 P201-9  
Nov 1970

Descriptors: exceptional child research; cerebral palsy; auditory perception; task performance; aural stimuli; recall (psychological); perception

This study investigated the task performance of cerebral palsied children under conditions of reduced auditory input and under normal auditory conditions. A nonhandicapped group was studied in a similar manner. Results indicated that under conditions of reduced auditory input, cerebral palsied children showed some positive change in performance on recall of a missing picture test, an attention test, and on parts of a learning test and digit span test. They showed no change in performance on visual-perceptual or perceptual-motor tasks. The nonhandicapped children showed no significant change in performance under conditions of reduced auditory input. (Author)

#### ABSTRACT 30483

EC 03 0483 ED N.A.  
Publ. Date Oct 70 8p.  
Wolinsky, Gloria

#### Current Status and Future Needs in Research on the Orthopedically Handicapped Child.

EDRS not available  
Rehabilitation Literature: V31 N10 P290-6, 318 Oct 1970

Descriptors: exceptional child research; physically handicapped; educational trends; orthopedically handicapped; research needs; research utilization; role theory; personality theories

The complexity of the condition designated as orthopedically handicapped is discussed, and the need for a new approach to research in the field is cited. The implication of role theory in research and the meaning of the roles of illness and deviancy are described. Additional developmental trends in research are viewed including dynamic psychology and personality theory. The need for organized principles, attitude changes, and effective utilization of research resources in the area of the orthopedically handicapped is emphasized. (RD)

#### ABSTRACT 30855

EC 03 0855 ED N.A.  
Publ. Date Dec 70 2p.  
Love, Nash W., Jr.

#### The Relative Occurrence of Secondary Disabilities in Children with Cerebral Palsy and Other Primary Physical Handicaps.

EDRS not available  
Exceptional Children: V37 N4 P301-2  
Dec 1970

Descriptors: exceptional child research; physically handicapped; multiply handicapped; cerebral palsy; incidence

Sixty-one elementary school children (ages 6-12) with a primary diagnosis of physically handicapped were evaluated to determine the presence of secondary disabilities. Of the total group, 84% had such disabilities. Of the 36 cerebral palsied children, 92% had secondary disabilities compared to 74% of the other 25. The cerebral palsied children had significantly more mental retardation and speech disabilities. The importance to educators of these multiple disabilities is noted. (RJ)

#### ABSTRACT 30866

EC 03 0866 ED 044 879  
Publ. Date 69 163p.

#### Symposium on Spina Bifida (Denver, Colorado, November, 1969).

Colorado University, Denver, Medical Center  
Social and Rehabilitation Service (DHEW), Washington, D. C., Office of Research, Demonstrations, And Training

EDRS mf, hc

Descriptors: exceptional child research; physically handicapped; special health problems; medical treatment; medical evaluation; conference reports; motor development; interdisciplinary approach; therapy; personal adjustment; Spina Bifida

The objectives of the symposium were to define the problems of the child with spina bifida and to present practical means of management, using a multidisciplinary team approach. Eight papers defining the problem cover the epidemiology of spina bifida, pathophysiology, musculoskeletal defects, incontinence of

bladder and bowel, problems of function and of intellect, socio-economic problems, and the family. Six papers concern the following aspects of management: comprehensive management of the newborn, immediate repair, urologic management, management of hydrocephalus, mobility, and problem solving in management. Four papers discuss the older child in terms of educational programs, hip reconstruction, nursing, and adolescence. (KW)

#### ABSTRACT 31001

EC 03 1001 ED 044 891  
Publ. Date Feb 70 229p.  
Pate, John E.

#### The School Adjustment of Post-Meningitic Children. Final Report.

Vanderbilt University, Nashville, Tennessee

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

EDRS mf, hc  
OEG-0-8-070644-1753  
BR-7-0644

Descriptors: exceptional child research; special health problems; learning difficulties; personal adjustment; academic achievement; peer relationship; intelligence level; psychological characteristics; physical characteristics; meningitis

To study the school adjustment of children known to have had prolonged high fevers, 25 elementary school students who had had acute bacterial meningitis were matched by age, sex, and socioeconomic levels with peers from their same classroom. The nature and extent of school problems and educational handicaps of the post-meningitic children were examined through information obtained by the data gathering devices constructed for the study. Information gathered related to school adjustment, academic achievement, teacher and peer ratings, psychological test performance, speech and hearing assessment, and pediatric, psychiatric, and visual examinations (total of more than 1,000 different variables). The post-meningitic children performed significantly poorer than the controls on many school related behaviors (deficient on teacher ratings of overall school adjustment and academic problems, and in reading achievement, instructional receptivity, getting along with classmates, self-confidence, and gross as well as fine motor coordination). Appended are an extensive annotated bibliography of the sequelae of acute bacterial meningitis, data collection forms, print-outs of categorical raw data, and various tables of correlation and factor structure, and intercorrelations of factor scores. (KW)

#### ABSTRACT 31232

EC 03 1002 ED N.A.  
Publ. Date Feb 70 368p.  
Smith, David W.

#### Recognizable Patterns of Human Malformation: Genetic, Embryologic, and Clinical Aspects.

EDRS not available  
W. B. Saunders Company, West Washington Square, Philadelphia, Pennsylvania 19105 (\$16.00).

Descriptors: exceptional child research; anomalies; genetics; reference book; physically handicapped

The text representing Volume 7 in a series on Major Problems in Clinical Pediatrics contains photographs and diagnostic commentary on approximately 150 congenital abnormalities. Broad categories of malformations include such conditions as chromosomal abnormality syndromes, joint dysplasia, muscular disorders, facial defects, hamartoses, ectodermal dysplasias, osteochondrodysplasias, osteopetroses, mucopolysaccharidoses, and individual anomalies as features of particular syndromes. Aspects of morphogenesis, genetics, and minor malformations as clues to more serious problems are presented. Related references are provided for each syndrome. (RD)

#### ABSTRACT 31629

EC 03 1629 ED N.A.  
Publ. Date 70 180p.  
Horowitz, Mardi J.

#### Psychosocial Function in Epilepsy.

EDRS not available  
Charles C Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 (\$10.50).

Descriptors: exceptional child research; emotionally disturbed; neurologically handicapped; epilepsy; medical treatment; psychophysiology

Psychosocial functioning in temporal lobe epileptics whose seizures resisted efforts at control using anticonvulsant drugs was investigated. Of the 125 patients seen over the 5 year period, 29 underwent surgery; the report concentrated on this surgical subgroup. The patients' psychological reactions, both during the illness and after treatment, were studied and phases of psychosocial rehabilitation examined. Researchers found that even in patients relieved of seizures, immediate psychosocial improvement was not common; some developed substitute symptoms and many had worsening of paranoid or depressive trends. Provisional indications were also made of a syndrome of organization deficit in temporal lobe epilepsy rendering the patients less able to develop and carry through concrete planning. (CD)

#### ABSTRACT 31719

EC 03 1719 ED N.A.  
Publ. Date Mar 71 2p.  
Friedman, Ronald J.; MacQueen, John C.

#### Psychoeducative Considerations of Physically Handicapping Conditions in Children.

EDRS not available  
Exceptional Children: V37 N7 P538-9 Mar 1971

Descriptors: exceptional child research; physically handicapped; mentally handicapped; emotional problems; multiply handicapped; incidence

To ascertain the prevalence of intellectual handicaps and emotional disturbances among physically handicapped

children, a sample of 195 physically handicapped children from a six-county area of Iowa were evaluated by a team of specialists in diagnostic clinics. Incidence of five major categories of physical handicap was determined. It was found that 43% of the sample had some degree of mental retardation (IQ less than 80) and retardation was most frequently associated with cerebral palsy. The EMR physically handicapped represented only 5% of EMR population in the area, while the TMR physically handicapped represented 26% of all TMR children. Incidence of hearing loss was 7% and incidence of speech handicaps was 37% (most frequently articulation problems and among the cerebral palsied) in the sample. Approximately 25% showed some psychological maladjustment, and 20% of the families evaluated had adjustment problems related to the handicapped child. (KW)

#### ABSTRACT 31781

EC 03 1781 ED 048 677  
Publ. Date Sep 70 137p.  
Prisuta, Richard

#### A Follow-Up Study of Auditorially, Visually, and Orthopedically Handicapped Pupils in Cincinnati.

Pittsburgh University, Pennsylvania, Office of Research and Field Services  
EDRS mf, hc

Descriptors: exceptional child research; vocational education; followup studies; handicapped; aurally handicapped; visually handicapped; physically handicapped; manpower development; public education; interviews; Ohio

A followup study of aurally, visually, and physically handicapped graduates of the Cincinnati Public Schools was investigated for use in future educational planning for handicapped children. A random selection of 24 aurally handicapped, 15 visually handicapped and 34 physically handicapped graduates were interviewed. Twenty-nine of the group met the criteria of being employed with a measurable wage and employers of all 29 subjects were interviewed. Findings were indicated by the researchers to show that the majority of the handicapped pupils were capable of successful occupational adjustment to unskilled and semiskilled jobs; however, impractical school experiences were not marketable enough to provide economic stability. Recommendations were made that the administration should assume more responsibility for the occupational placement of disabled pupils; the scope of the pre-vocational training program should be expanded to meet the changing labor market demands; and specific program objectives which pair specific skills with specific job opportunities based on employment situations of former pupils should be created. (CD)

#### ABSTRACT 31784

EC 03 1784 ED 048 680  
Publ. Date Jan 71 197p.  
Deschin, Celia S.; Nash, Marygold V.

#### Children Together: The Effect of Integrated Group Experiences on Orthopedically Handicapped Children.



New York Service for the Handicapped.  
New York  
National Institute of Mental Health  
(DHEW). Bethesda, Maryland  
EDRS mf.hc

Descriptors: exceptional child research;  
physically handicapped; mental health;  
recreational programs; group relations;  
peer relationship; self concept

To study the effect on physically handicapped children's mental health of organized group activities in community centers and settlements, 230 children participated in a 2 year demonstration project. Mental health was defined as the child's social functioning in home and school and as reflected in the child's self image; and it was hypothesized that the mental health of mildly physically handicapped children improved through recreational activities with their nonhandicapped peers. It was also speculated that no special or additional staff would be needed. Data was obtained through interviews with the children, families, teachers, group leaders, and placement counselors. Researchers felt that, after comparing factors concerning the families, the school and the children's self evaluations, the children showed improvement attributed to associating with their nonhandicapped peers. The second hypothesis concerning stalling was not confirmed. Recommendations for community centers, schools, and adult education to benefit the mental health of physically handicapped children were made. (CD)

#### ABSTRACT 31808

EC 03 1808 ED N.A.  
Publ. Date 65 213p.  
Kreindler, A.

**Experimental Epilepsy: Progress in Brain Research, Volume 19.**  
EDRS not available  
Elsevier Publishing Company, 52 Vanderbilt Avenue, New York, New York 10017 (\$16.00).

Descriptors: exceptional child research;  
medical research; epilepsy; neurological defects

Of interest to neurologists and neurophysiologists, the text deals exclusively with experimental data concerning epilepsy. The book is volume 19 in a series on progress in brain research. The volume approaches various aspects of epilepsy, such as the phenomenon of after-discharges, the properties of the epileptogenic focus as well as of the epileptic neuron, the pathes for intracerebral spread of the epileptic after-discharges, the methods of producing an epileptic focus, the problems of post and intrastimulatory discharges, the relationship between epileptogenic focus and evoked activity, the trigger mechanism of the seizure, and the neurochemical aspect of the experimental convulsion. (CD)

#### ABSTRACT 32228

EC 03 2228 ED 050 514  
Publ. Date Jun 70 82p.  
Deschin, Celia S.

**They Can Communicate: Self-Image Evaluation.**

New York Service for the Handicapped.  
New York  
EDRS mf.hc

Descriptors: exceptional child research;  
physically handicapped; self concept;  
test construction; demonstration projects;  
test validity; test evaluation; measurement techniques; social work; New York; Self-Image Evaluation

As part of a 2 year demonstration project to evaluate the effect on the mental health of physically handicapped children placed in organized group activities with their nonhandicapped peers, two research instruments were used. The monograph discusses one of the instruments, the Self-Image Evaluation. A synopsis of the project is provided; and a brief history of the Self-Image Evaluation is included. Use of the testing tool with handicapped and nonhandicapped children, children in foster home care, and in the children's integration study is reported. Illustrations of the use of the testing device taken from the demonstration project are also included. The test's applicability to social work practice, such as to show that children can communicate indirectly through no response to questions that are disturbing, and to suggest that it is important that what the child reveals through the test be obtained before too much credence be attached to the parent's presentation of the child's problem, is made. The second research technique, the Comprehensive Family Rating technique, is discussed in EC 032 299. A detailed presentation of the entire demonstration project is found in EC 032 330. (CD)

#### ABSTRACT 32229

EC 03 2229 ED 050 515  
Publ. Date Sep 70 38p.  
Deschin, Celia S.

**Families in Trouble: A Comprehensive Family Rating Technique.**

New York Service for the Handicapped.  
New York  
EDRS mf.hc

Descriptors: exceptional child research;  
physically handicapped; family (sociological unit); behavior rating scales; demonstration projects; family influence; test construction; social work; test evaluation; family problems; New York; Comprehensive Family Rating

As part of a demonstration project to determine the effect on the mental health of physically handicapped children of integration with their nonhandicapped peers, two research instruments were developed. The monograph discusses one of the testing devices, the Comprehensive Family Rating. After a brief summary of the project, a description of the instrument, which examines the child's handicap and its effect on the household, parental attitude and parental handling, is given. Scoring for the three components of the test and utilization of the technique, using illustrations from the project, are also described. It is the author's opinion that the technique could help to clarify parental inability in child rearing by strengthening the social worker's sensitivity, insights, and skills through less-

ening the need for generalized value judgments. Other documents related to the project include EC 032 228 which discusses the Self Image Evaluation, and EC 032 230 which is the final comprehensive report on the project. (CD)

#### ABSTRACT 32232

EC 03 2232 ED 050 516  
Publ. Date 70 86p.

Bloek, J. R. and Others

**Measurement of Cardiac and Respiratory Responses in Physically Disabled and Non-Disabled Groups in a Variety of Psychological and Industrial Conditions.**

Human Resources Center, Albertson, New York

Insurance Company of North America, Albertson, New York;

Social and Rehabilitation Service (DHEW), Washington, D. C., Division of Research and Demonstration Grants  
EDRS mf.hc

Descriptors: exceptional child research;  
physically handicapped; social health problems; stress variables; physiology; physical examinations; medical evaluation; test reliability

In order to determine ways in which disabled and non-disabled people react to low levels of stress, the reliability of heart and respiratory measures under different conditions was studied. Eighty-five subjects (paraplegics, cardiacs, and physically normal controls) were given a variety of tests with the following results: over a 1-week interval the physiological measures were less reliable than most psychometric paper and pencil measures; respiration was more reliable than cardiac measures; and the more dynamic the stimulus situation, the lower the reliability of the physiological measure. No consistent patterns of a relationship between physiological measures and the relatively more static paper and pencil test was found. Indications were that under low levels of stress the patients in different disability categories seemed to show differential responses in the disability affected areas. (Author/RJ)

#### ABSTRACT 32337

EC 03 2337 ED N.A.  
Publ. Date Jun 71 7p.

Kolin, Irving S. and Others

**Studies of the School-Age Child with Meningomyelocele: Social and Emotional Adaptation.**

EDRS not available  
Journal of Pediatrics; V78 N6 P1013-9  
Jun 1971

Descriptors: exceptional child research;  
physically handicapped; anomalies; emotional adjustment; family attitudes; parent attitudes; social adjustment; meningomyelocele

Thirteen school-age children with meningomyelocele and their families underwent intensive social service interviews and psychiatric evaluation. A good to fair adaptation was found in seven of the children and in five of the parents. Divorce or separation occurred in six of the families studied. Both parents and children used a wide variety of adjust-

ment mechanisms. Social and emotional factors appeared to be stronger determinants of adaptation than severity of physical impairment. Communication between the physician and the family was crucial in the adjustment process. The data indicate a need for initial and long-term family support. Psychiatric screening is valuable in identifying patients in need of help. Timely intervention could serve to modify psychopathology and improve the chance for a more successful adaptation. (Author)

**ABSTRACT 32376**

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

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

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

**ABSTRACT 32567**

EC 03 2567 ED N.A.  
 Publ. Date 71 102p.  
 Pringle, M. L., Kellmer, Fiddes, D. O.  
**The Challenge of Thalidomide.**  
 EDRS not available  
 Humanities Press, Inc., 303 Park Avenue South, New York, New York 10010 (\$3.00).

Descriptors: exceptional child research; physically handicapped; educational needs; academic achievement; intellectual development; emotional adjustment; social adjustment; thalidomide children

Reported is a study of 80 children in Scotland affected by thalidomide, conducted to explore their present as well as likely future educational needs. Ten different tests and assessment measures, supplemented by child and parent interviews were administered, covering various aspects of intellectual development and social and emotional adjustment at school and at home. Reported are findings for the whole group related to range, degree, and type of defects, intellectual and language development, educational attainment, social and emotional adjustment, home background and parental attitudes, achievement in relation to physical impairment and environmental circumstances, and present schooling in relation to scholastic achievement. Findings for various sub-groups, representing various degrees of handicap or intelligence or other factors, are also detailed. Six case studies are presented. In general, the subjects were found to closely resemble the general child population in intellectual ability, level of educational achievement and emotional adjustment. Only about one third of them required special schooling. Recommendations for present and future educational provisions are made. (KW)

**ABSTRACT 32581**

EC 03 2581 ED N.A.  
 Publ. Date 70 8p.  
 Sattler, Jerome M.; Tozier, Leonard L.  
**A Review of Intelligence Test Modifications Used with Cerebral Palsied and Other Handicapped Groups.**  
 EDRS not available  
 Journal of Special Education; V4 N4 P391-8 Fall-Win 1970

Descriptors: exceptional child research; handicapped children; cerebral palsy; intelligence tests; intelligence quotient; test reliability; testing problems; research reviews (publications)

The review considers problems and research findings associated with the administration of intelligence tests in a modified manner to handicapped persons, particularly the cerebral palsied. It is reported that seven studies showed nonsignificant differences and two studies showed significant differences in scores between modified tests and tests administered using standard procedures, although few studies compare handicapped and non-handicapped groups. Also reviewed is research on the reliability and validity of IQ scores for cerebral palsied children. It is concluded that, despite some controversy, such IQ scores do have a satisfactory degree of reliability. (KW)

**ABSTRACT 32661**

EC 03 2661 ED N.A.  
 Publ. Date 71 6p.  
 Kaufman, Richard V.; Hersher, Betsy  
**Body Image Changes in Teen-Age Diabetics.**

EDRS not available  
 Pediatrics; V48 N1 P123-8 Jul 1971

Descriptors: exceptional child research; special health problems; diabetes; body image; emotional adjustment; self concept; fantasy; adolescents

Fantasies of five diabetic teenagers about their illness were collected in a study of the relationship between body illness and body image. All of the subjects revealed underlying distortions of their knowledge of the disease process based on primitive notions about physical causality. The imagery employed was strongly visual and illness was seen as the result of external deprivation, or of various internal abnormalities and deficiencies, such as absence of part of the pancreas, blockage within the pancreas, or dilation of the stomach. The influence of previous instruction and education by the medical staff was found to be superficial and in all cases the children's intellectual knowledge was incorporated into their own private thought systems. The patients drew what the illness meant to them rather than what they knew about the pathophysiological processes, and in this way demonstrated the link between physical illness and body image. The patients described feeling seriously damaged by the diabetes, and were able to graphically symbolize their conceptions of this damage. Knowledge that the child's illness significantly alters a part of the self contributes to greater precision and effectiveness in communication. (Author)

**ABSTRACT 32892**

EC 03 2892 ED N.A.  
 Publ. Date Aug 71 9p.  
 Sibinga, Maarten S.; Friedman, C. Jack  
**Complexities of Parental Understanding of Phenylketonuria.**  
 EDRS not available  
 Pediatrics; V48 N2 P216-24 Aug 1971

Descriptors: exceptional child research; special health problems; parent education; educational background; physicians; communication problems; phenylketonuria; pediatrics

Parental understanding of phenylketonuria (PKU), investigated through a questionnaire, was evaluated as to completeness and with respect to distortion. Only 19% of 79 parents gave adequately correct answers. The education of the parents was not related to their understanding. Neither the intellectual status of the child with PKU nor its behavioral reactions were found to be related to the individual parent's understanding of the illness. However, the better the understanding of a marital pair, the more intelligent the child was (p less than .05) and the higher its behavioral score tended to be (p less than .10). Mothers with more complete understanding tended to have brighter sons. Half of the total parent group displayed considerable tendencies to distort in their answers to the questionnaires, education again being unrelated to distortion. Fathers who were more prone to distort had children with lower IQ scores (p less than .05) and poorer

behavior ratings (p less than .10). The authors believe that effectiveness of communication with parents is, in part, related to the nature of parental thinking. This might be explored independently, not where it pertains to the child's illness. (Author)

**ABSTRACT 32915**

EC 03 2915 ED N.A.  
Publ. Date Aug 71 307p.  
Bagley, Christopher  
**The Social Psychology of the Epileptic Child.**  
EDRS not available  
University of Miami Press, Drawer 9088,  
Coral Gables, Florida 33124 (\$12.50).

Descriptors: exceptional child research; special health problems; epilepsy; neurologically handicapped; neurological defects; seizures; behavior patterns; social attitudes; social influences; family attitudes

In order to measure the extent to which psychological, biological, and social factors interact with one another to affect epileptic children, and thus to describe the reality in which epileptics and their families live, 118 epileptic children (median age 14.0 years) who were outpatients in the neurological department of a teaching hospital, were studied for 3 years. The study aimed to provide clinicians with additional information about epileptic children to help treatment of psychiatric disorders. The integrated study used measurements of psychiatrists, neurologists, social workers, psychologists, radiographers, and electroencephalographers. Review of studies about psychiatric and social aspects of epilepsy in adolescents and children provided background for the study's primary analysis relating to behavior and environment of epileptic children, attitudes of their parents, manifestations and frequency of their fits, existence of brain damage, type of epilepsy, intelligence data, attainment data, physical data, and developmental data. The study's conclusion was that sociology, psychology, and biology merged in describing constraints on role behavior of epileptic children. (CB)

**ABSTRACT 32973**

EC 03 2973 ED N.A.  
Publ. Date Sep 71 9p.  
Pless, Ivan B.; Roghmann, Klaus J.  
**Chronic Illness and Its Consequences: Observations Based on Three Epidemiologic Surveys.**  
EDRS not available  
Journal of Pediatrics; V79 N3 P351-9 Sep 1971

Descriptors: exceptional child research; emotionally disturbed; special health problems; socially maladjusted; academic achievement; behavior problems; emotional problems; pediatrics; epidemiology

The findings of three independent epidemiologic surveys provide the basis for observations on patterns of care for chronically ill children and frequency of secondary social and psychological hand-

icaps. Tables provide information on prevalence of chronic physical disorders in childhood; demographic characteristics of chronically ill children; clinical characteristics of chronic disorders in childhood; comparisons of chronically ill versus healthy children in educational performance, social functioning, and psychological functioning; and psychological consequences by type, duration, and severity of chronic disability. Data show that, in general, chronically ill children fare less well than healthy children, suggesting that a high proportion of social and psychological disturbances in chronically ill children must be attributed to physical disorders. On the assumption that most social and psychological problems are preventable, the article advocates that chronically ill children receive coordinated, comprehensive care to avoid secondary complications. (CB)

**ABSTRACT 33068**

EC 03 3068 ED N.A.  
Publ. Date 71 287p.  
Aas, Kjell  
**The Allergic Child.**  
EDRS not available  
Charles C Thomas, Publisher, 301-327  
East Lawrence Avenue, Springfield, Illinois 62703 (\$11.75).

Descriptors: exceptional child services; special health problems; allergy; asthma; medical treatment; medical evaluation; medical case histories; etiology; disease control; parent education

Written primarily for parents and those people having contact with allergic children, the book presents information to improve the understanding and treatment of allergic children. Allergic diseases are defined as illnesses of special reactions. Emphasis is placed on more serious or difficult allergic reactions in both the general discussion and the case histories. Topics discussed are the role of allergens in causing allergic diseases, allergy prophylactic measures, threshold mechanisms, allergic rhinitis, hay fever, seasonal rhinitis, pollen allergies, asthma, bronchitis, allergic skin diseases, allergic shock, serum sickness, allergic eyes, headache, mental factors in allergic diseases, environmental factors, allergy diagnosis, general instructions for elimination and provocation diets for allergy, allergen elimination, hyposensitization, medicinal effects and side-effects, physical treatment and gymnastics for asthmatics, prophylactic vaccines, use of gamma-globulin and fluoride, growing out of allergies, the school and the allergic child, and allergy and choice of vocation. (CB)

**ABSTRACT 33100**

EC 03 3100 ED N.A.  
Publ. Date Jan 69 1072p  
Gardner, Lytt I., Ed.  
**Endocrine and Genetic Diseases of Childhood.**  
EDRS not available  
W. B. Saunders Company, West Washington Square, Philadelphia, Pennsylvania 19105 (\$34.00).

Descriptors: exceptional child research; special health problems; diseases; metabolism; genetics; medical evaluation; medical treatment; textbooks; endocrine glands; pediatrics

The multi-authored textbook provides a technical information source on the pathophysiology, diagnosis, and therapy of principal endocrine and genetic diseases in the pediatric age group. Information covers differential diagnosis and management of disorders in question, as well as academic aspects of the disorders. Normal and abnormal growth patterns, beginning with growth and development of the human embryo and fetus, introduce the book. Discussion of pituitary and thyroid disorders follows, including a section on the hormone thyrocalcitonin. Also covered are parathyroid disorders, disorders of the adrenal cortex, ontogenesis of the gonads, and disorders of sexual development. An examination of syndromes exhibiting chromosomal abnormalities reviews both cytogenetic and dermatoglyphic techniques. The latter portion of the book covers major biochemical errors and metabolic diseases encountered in the younger age group such as disorders of potassium and magnesium metabolism, hereditary metabolic bone diseases, disorders of catecholamine metabolism, disorders of carbohydrate metabolism, genetic defects of amino acid metabolism, genetic defects in protein metabolism, disturbances of serum lipoproteins, the lipidoses, obesity in children and adolescents, cystic fibrosis, and disorders of heme and porphyrin metabolism. Psychologic and genetic counseling aspects of endocrine and genetic disease is the final subject explored. (CB)

**ABSTRACT 40724**

EC 04 0724 ED N.A.  
Publ. Date Jan 72 5p.  
Kotok, David  
**Development of Children with Elevated Blood Lead Levels: A Controlled Study.**  
EDRS not available  
Journal of Pediatrics; V80 N1 P57-61 Jan 1972

Descriptors: exceptional child research; special health problems; child development; motor development; language development; environmental influences; lead poisoning

Compared was the developmental status in three groups of children: children with elevated blood lead levels; a control group matched for age, sex, race, environment, neonatal condition, and presence of pica; and children from a higher socioeconomic level. Deficiencies in fine motor development and language development were found in children from both the lead group and the control group. It was also found that the deficiencies were related to the children's inadequate environmental influences. Significant differences in developmental scores were not found between the lead and control groups, which suggested that the developmental deficiencies were not secondary to lead toxicity. (CB)



**ABSTRACT 40757**

EC 04 0757 ED N.A.  
 Puhl. Date Dec 71 2p.  
 Fair, Dennis T.; Birch, Jack W.  
**Effect of Rest on Test Scores of Physically Handicapped and Nonhandicapped Children.**  
 EDRS not available  
 Exceptional Children; V38 N4 P335-6  
 Dec 1971

Descriptors: exceptional child research; physically handicapped; test interpretation; testing problems; leisure time

The study investigated the inclusion of a rest period between sections of the Advanced Stanford Achievement Test for both physically handicapped and nonhandicapped children. Results indicated a significant improvement in test scores for only the handicapped students receiving the rest periods. (CB)

**ABSTRACT 40772**

EC 04 0772 ED 057 537  
 Puhl. Date 71 36p.  
 Fischer, Margaret  
**A Current Look at Phenylketonuria (PKU).**  
 Purdue University, Lafayette, Indiana,  
 Department Of Education  
 EDRS mf,hc

Descriptors: exceptional child research; special health problems; diseases; medical treatment; research reviews (publications); medical evaluation; bibliographies; phenylketonuria

Research was reviewed on the current status of phenylketonuria, an hereditary amino acid metabolic disorder that can cause severe mental retardation, physical complications, and emotional difficulties if not detected and treated early in childhood. A majority of the research cited was published in the 1960's. Topics covered were: discovery of phenylketonuria; etiology; incidence; clinical syndrome; possible resulting mental retardation; frequent common physical characteristics; possible resulting neurological disorders; detection techniques through urine, blood, fluorometric, and chromatographic screening tests; considerations on dietary treatment; usual positive effects of treatment; treatment problems concerning acceptance of treatment by parents, acceptance by child himself, and regular medical surveillance; and anticipatory and corrective measures for prevention of phenylketonuria. A bibliography of about 70 documents and a listing of states having mandatory screening laws were included. (CB)

**ABSTRACT 40777**

EC 04 0777 ED N.A.  
 Puhl. Date 71 307p.  
 Bagley, Christopher  
**The Social Psychology of the Epileptic Child.**  
 EDRS not available  
 University of Miami Press, Box 9088,  
 Coral Gables, Florida 33124 (\$12.50).

Descriptors: exceptional child research; special health problems; epilepsy; emotional problems; behavior patterns; emotionally disturbed; psychological charac-

teristics; research reviews (publications); social characteristics; social psychology; behavior problems; neurological defects

The examination of epileptic children from a socio-psychological perspective focuses upon the study of social, psychological, and biological variables and how these variables interact to influence behavior. Attention is given to the extent to which epileptic children are psychiatrically disturbed, their behavior, any endemic relationship of psychiatric disorder to either brain damage or to epilepsy itself, association of psychiatric disorders with other personality or social factors, and intelligence level and intellectual attainments. The first portion of the book reviews studies about psychiatric and social aspects of epilepsy in childhood and adolescence. The second portion reports results of a research project studying the psychological status, social orientation, and neurological condition of a sample of 118 outpatient epileptic children (ages 3-16 years, median age 14.0). Analyzed are the children's behavior and environment, parents' attitudes, manifestations and frequency of seizures, existence of brain damage, type of epilepsy, intelligence, attainment, and physical development. Sociology, biology, and psychology are integrated in the discussion of factors underlying behavior disorder in epileptic children. (KW)

**ABSTRACT 40845**

EC 04 0845 ED N.A.  
 Puhl. Date Jan 72 6p.  
 Sareen, Chandra K. and Others  
**Tuberous Sclerosis: Clinical, Endocrine, and Metabolic Studies.**  
 EDRS not available  
 American Journal of Diseases of Children; V123 N1 P34-9 Jan 1972

Descriptors: exceptional child research; multiply handicapped; mentally handicapped; physically handicapped; medical research; genetics; metabolism; clinical diagnosis; biochemistry; institutionalized (persons); tuberous sclerosis

Clinical, endocrine, and metabolic evaluations were performed in seven institutionalized patients with tuberous sclerosis. Several of these patients had evidence of abnormal pituitary adrenal function; two had thyroid disorders; five had abnormal responses to intravenous glucose tolerance tests; and all seven patients had high serum alkaline phosphatase levels. Skeletal surveys disclosed multiple skeletal defects including abnormalities in the size of the sella turcica. These findings indicate that endocrine and metabolic dysfunction is a frequent component of tuberous sclerosis and may be evidenced by a variety of manifestations. (Author)

**ABSTRACT 40879**

EC 04 0879 ED N.A.  
 Puhl. Date 71 130p.  
 Goldin, George J. and Others  
**The Rehabilitation of the Young Epileptic: Dimensions and Dynamics.**  
 EDRS not available  
 D.C. Heath and Company, 125 Spring Street, Lexington, Massachusetts 02173 (\$10.00).

Descriptors: exceptional child research; special health problems; epilepsy; adolescents; personal adjustment; social adjustment; family influence; community attitudes; parent attitudes; rehabilitation

A total of 203 completed questionnaires were used to describe and assess the adolescent epileptic's level of psychosocial functioning in areas of the family, education, recreation, and vocation and to make recommendations for rehabilitation. The epileptics ranged in age from 13 to 21 years of age, with 106 males and 97 females. The average epileptic came from a family with a median income of \$9,000. The general finding was that the disabling potential of epilepsy in children was more psychosocial than physical. Personal adjustment of the epileptic adolescent was found to depend greatly on whether epilepsy occurred by itself or in combination with other disabilities. Only one medical variable, age of onset, was thought to have some influence on the adolescent's personal and social adjustment. Those adolescents able to adjust well in the family environment were also said to adjust to social systems external to the home; family influence and parent attitudes, therefore, were crucial. Those adolescents having difficult interpersonal relationships at home were found to need social, psychiatric, or vocational services frequently. Community attitudes toward epilepsy often influenced the adolescent's personality development. Recommendations focused on the need for more comprehensive counseling of parents and child, for more integrated social and educational resources for the epileptic adolescent, and for more community education on the nature of epilepsy. (CB)

**ABSTRACT 41239**

EC 04 1239 ED N.A.  
 Puhl. Date 72 347p.  
 Roskies, Ethel  
**Abnormality and Normality: The Mothering of Thalidomide Children.**  
 EDRS not available  
 Cornell University Press, 124 Roberts Place, Ithaca, New York 14850 (\$12.50).

Descriptors: exceptional child research; physically handicapped; anomalies; mother attitudes; mothers; longitudinal studies; child rearing; emotional adjustment; parent child relationship; thalidomide children

Reported are results of a 5-year study conducted at the Rehabilitation Institute of Montreal concerning the perceptions of 20 mothers of the process of hearing and rearing, or deciding not to rear, a congenitally limb-deficient thalidomide child. Dealt with are such issues as the mother's perception of professional reactions to the baby's birth, of reactions of others, and of her own attitudes toward herself and toward the child. Emphasis is placed on typical problems and common patterns of behavior rather than on individual case histories. Traced are biological, psychological, and social factors affecting thalidomide maternity and the interaction and change over time of these factors. (KW)

**ABSTRACT 41626**

EC 04 1626 ED N.A.  
 Publ. Date Apr 72 6p.  
 Bachmann, Winnie H.

**Variables Affecting Postschool Economic Adaptation of Orthopedically Handicapped and Other Health-Impaired Students.**

Rehabilitation Literature; V33 N4 P98-102. 114 Apr 1972

Descriptors: exceptional child research; physically handicapped; cerebral palsy; vocational adjustment; employment experience; physical characteristics; young adults; educational background

Investigated were variables influencing post school economic adaptation of orthopedically handicapped and other health-impaired students. Of the 167 subjects interviewed, 89 were still in school, 27 were effectively employed, and 51 were unemployed. Variables found to be significantly related to effective employment were completing a secondary school program, having had work experience in schools, and having good hand use, mobility, and independence in mobility. Placement of the subjects in classes for non-handicapped students had little influence on their eventual economic adaptation. The findings of the study suggested that the medical-educational program should be redefined in light of the adult role that each student realistically may be able to accept. (Author)

**ABSTRACT 42123**

EC 04 2123 ED N.A.  
 Publ. Date Jun 72 11p.

**Studies of the Sudden Infant Death Syndrome in King County, Washington. Part 3: Epidemiology.**

EDRS not available  
 Pediatrics; V49 N6 P860-70 Jun 1972

Descriptors: exceptional child research; special health problems; infancy; etiology; death; diseases; sudden infant death syndrome; pediatrics

Excluding the first week of life, sudden infant death syndrome (SIDS) is the greatest single cause of death during the first year of life and second only to accidents as the greatest killer of children under age 15. All cases of SIDS occurring in King County, Washington (170) during a 44-month period were studied. Birth certificate data from all children born in the county during the same period were utilized for comparison. Findings included a characteristic age distribution (peak at 2 to 3 months), preponderance in males, low birth weight babies, and in lower socioeconomic class families. Seasonality and apparent time clustering were present in the infants. All SIDS infants died during sleep in a silent fashion. Forty-four percent of the babies had an upper respiratory infection in the 2-week period prior to death. The epidemiologic findings point to viral infection as playing a major contributory role in SIDS. (Author)

**ABSTRACT 42297**

EC 04 2297 ED N.A.  
 Publ. Date Jul 72 4p.  
 Schlesinger, Lawrence E.; Nhan, Nguyen

**The Research Role in a Residential Treatment Center.**

EDRS not available  
 Rehabilitation Literature; V33 N7 P194-7 Jul 1972

Descriptors: exceptional child research; epilepsy; residential programs; research needs; research methodology; multiply handicapped; special health problems; emotional problems

Summarized is the research role in a residential treatment center for epileptic children aged 7 to 16 years who also have emotional problems, personal adjustment problems, and possible learning problems. Major services provided are residential, diagnostic evaluation, and summer camp. The role of research in the program is explained to be that of using social research to improve social practice. Conducting basic studies, importing theory and research, and importing validated practice are discussed in relation to the research task designed to import new knowledge from outside the organization. Then concerning the exporting of research knowledge to other programs and institutions, action research, self-study process, and development efforts performed inside the organization are covered. The article concludes with brief commentary on evaluation criteria of the research unit. (CB)

**ABSTRACT 42318**

EC 04 2318 ED N.A.  
 Publ. Date Aug 72 8p.

**Transient Myocardial Ischemia of the Newborn Infant: A Form of Severe Cardiorespiratory Distress in Full-Term Infants.**

EDRS not available  
 Journal of Pediatrics; V81 N2 P243-50 Aug 1972

Descriptors: exceptional child research; special health problems; diseases; infants; cardiac (person); medical research; medical evaluation; pediatrics

It was found that a syndrome of cyanosis, congestive failure, and acute left ventricular failure has mimicked severe congenital heart disease in three mature newborn infants. Diagnosis of hypoplasia of the left heart was reported to be suggested by weak arterial pulses, liver enlargement, and right heart overload in the electrocardiogram. It was postulated that the disorder was one of impaired coronary perfusion to portions of the right and left ventricular myocardium through increased work demands created by unusually brisk pulmonary vasoconstriction from hypoxia. Evidence for the tenet was said to lie in the striking abnormality of left ventricular ejection at angiocardiography and development of signs of myocardial ischemia on the electrocardiogram. (CB)

**ABSTRACT 42325**

EC 04 2325 ED N.A.  
 Publ. Date Aug 72 9p.

**Enzyme Activity in Classical and Variant Forms of Maple Syrup Urine Disease.**

EDRS not available  
 Journal of Pediatrics; V81 N2 P312-20 Aug 1972

Descriptors: exceptional child research; special health problems; diseases; metabolism; medical evaluation; medical research; maple syrup urine disease

In six subjects with classical maple syrup urine disease and in six subjects with variant forms of the disease, the branched-chain keto acid decarboxylase activity was said to have been determined in skin fibroblasts grown from the subjects. It was reported that the level of activity in the skin fibroblasts reflects the ability of the individual to degrade the amino acids, thus providing an index of the severity of the disease. Observations on sibling pairs were reported to indicate that the level of enzyme activity and the severity of the disease are genetically determined. Proposed is a three grade classification based on tolerance for dietary protein. The metabolic defect in all instances was found to involve the three branched-chain amino acids, providing further support for the concept that this degradative step is under the control of a single gene. (CB)

**ABSTRACT 42327**

EC 04 2327 ED N.A.  
 Publ. Date Aug. 72 3p.

Lazerson, Jack

EDRS mf,hc

**Hemophilia Home Transfusion Program: Effect on School Attendance.**

EDRS not available  
 Journal of Pediatrics; V81 N2 P330-2 Aug 1972

Descriptors: exceptional child research; special health problems; attendance; medical treatment; hemophilia

Compared were school attendance records of 20 patients with severe hemophilia A before and after development of cryoprecipitate. Analysis of results was found to indicate a dramatic decrease in school absences. Also noted was a mild to moderate increase in the amount of cryoprecipitate used in the home program, when compared to earlier usage in a hospital environment. (CB)

**ABSTRACT 42349**

EC 04 2349 ED 064 817  
 Publ. Date Jul 71 161p.

**Student Aides for Handicapped College Students. Final Report and Manual.**

St. Andrews Presbyterian College, Laurinburg, North Carolina  
 Social and Rehabilitation Service (DHEW).



Descriptors: exceptional child research; physically handicapped; college students; student volunteers; student adjustment; demonstration projects; student participation; academic achievement; guidelines; statistical data

The stated purpose of the project was to demonstrate that the use of student aides to assist selected physically handicapped students in the college setting, in conjunction with special physical facilities and individual counseling sessions for both the physically handicapped and the student aides, would result in a more satisfactory academic, physical, psychological, social, and vocational adjustment for both groups than would have otherwise been expected. The first part of the report presented the overall study, while the second part consisted of a manual for student aides and administrators of similar programs. The sample consisted of 29 male handicapped, 32 male aides, 33 female handicapped, and 72 female aides. Results showed that participants, when compared to general college students at the college, made better academic records and had a lower attrition rate. Most participants were reported to have found meaningful vocational placement which was related to their measured vocational interest profiles. It was concluded that student aides appeared to make a positive contribution to the total educational process for physically handicapped students, and that the aide role had no negative effects on the aides' own progress. (CB/Author)

#### ABSTRACT 42391

EC 04 2391 ED N.A.  
Publ. Date Aug 72 3p.  
Tan, Kim-Leong

##### The Metopic Fontanelle.

EDRS not available  
American Journal of Diseases of Children; V124 N2 P211-4 Aug 1972

Descriptors: exceptional child research; special health problems; anomalies; mentally handicapped; mongolism; heredity; medical research; metopic fontanelle

The clinical significance of the metopic fontanelle was evaluated by the examination of 1,892 control infants (clinically normal) and 88 infants with some clinical abnormality, during the newborn period. Included is a case study of a family with hypertelorism. A significantly increased incidence of the metopic fontanelle was found in infants with the congenital rubella syndrome, Down's syndrome, cleft lip with or without cleft palate, and widened sutures. It is not significantly increased in infants presenting with facial asymmetry with torticollis, and in a group comprising infants with various abnormalities; the numbers in each category of abnormality in this group were too few for direct comparison with the controls. The metopic fontanelle is easy to palpate, and the discovery of its presence might occasionally be helpful in the clinical examination of the newborn infant. (Author)

#### ABSTRACT 42482

EC 04 2482 ED N.A.  
Publ. Date Aug 72 6p.  
Pinkel, Donald and Others  
**Nine Years' Experience with Total Therapy of Childhood Acute Lymphocytic Leukemia.**  
EDRS not available  
Pediatrics; V50 N2 P246-51 Aug 1972

Descriptors: exceptional child research; diseases; research reviews (publications); medical treatment; special health problems; medical research; leukemia

Experience with combined chemotherapy and radiotherapy of acute lymphocytic leukemia (ALL) in children was reviewed. Multiple antimetabolite chemotherapy is effective in prolonging duration of continuous hematological remission. Craniospinal irradiation or cranial irradiation combined with intrathecal methotrexate in adequate doses inhibits relapse in the central nervous system. The high frequency of lengthy continuous complete remission achieved with total therapy indicates that ALL in children cannot be considered an incurable disease. Palliation is no longer an acceptable approach to its initial treatment. (Author)

#### ABSTRACT 42483

EC 04 2483 ED N.A.  
Publ. Date Aug 72 9p.  
Cohen, Matthew

##### Urinary Tract Infections in Children. I. Females Aged 2 through 14, First Two Infections.

EDRS not available  
Pediatrics; V50 N2 P271-8 Aug 1972

Descriptors: exceptional child research; diseases; females; medical treatment; special health problems; longitudinal studies; medical research; urinary tract

In January of 1964 a 20-year prospective study of urinary tract infections was begun at the Southern California Permanente Medical Group in Panorama City, California. This paper is concerned with 368 females, aged 2 through 14 years, who had their first infection diagnosed between January 1964 and August 31, 1969. No benefit could be demonstrated to Sulfisoxazole therapy exceeding 2 weeks for the first infection and 6 weeks for the second infection nor to treating with ampicillin instead of sulfisoxazole. A higher recurrence rate was found in those patients who, at the time of the first infection, had minimal abnormalities on urinalysis, infection with an organism other than *E. coli*, fever, or no symptoms. Recurrences of 40% and 60% were diagnosed after the first two infections respectively. Usually the patients with a recurrent infection were asymptomatic. It is therefore felt that the physician must take an active part in informing the patient of the need to return and contacting her if she fails to do so. The follow-up period should extend for at least 6 years after the last infection. (Author)

#### ABSTRACT 42486

EC 04 2486 ED N.A.  
Publ. Date Aug 72 9p.  
Lamarre, Andre and Others

#### Early Detection of Pulmonary Function Abnormalities in Cystic Fibrosis.

EDRS not available  
Pediatrics; V50 N2 P291-8 Aug 1972

Descriptors: exceptional child research; diseases; identification; medical evaluation; special health problems; medical research; cystic fibrosis

We studied gas exchange in 19 children with cystic fibrosis in whom measurement of lung volumes, flow rates and airway conductance, diffusing capacity and mixing efficiency were normal. A significant decrease in arterial oxygen tension was found together with a significant increase in alveolar-arterial difference for oxygen and physiologic dead space/tidal volume ratio. These findings are consistent with evidence that early in cystic fibrosis the site of obstruction is in the small airways. It is also suggested from these data that blood gas abnormalities occur before other parameters of lung function become abnormal. (Author)

#### ABSTRACT 42487

EC 04 2487 ED N.A.  
Publ. Date Aug 72 8p.  
Motoyama, E. K. and Others  
**Evaluation of Mist Tent Therapy in Cystic Fibrosis Using Maximum Expiratory Flow Volume Curve.**  
EDRS not available  
Pediatrics; V50 N2 P299-306 Aug 1972

Descriptors: exceptional child research; diseases; medical treatment; home visits; special health problems; medical research; cystic fibrosis

The effect of home mist tent therapy in cystic fibrosis was reexamined using the measurement of maximum expiratory flow volume (MEFV) curves, forced expiratory volume, and vital capacity in 16 patients every 2 weeks during a period of 4 to 5 months. In half of the patients the studies were made during an initial period of 8 to 12 weeks off and then a similar period on nocturnal mist tent therapy; in the other half the test conditions were reversed. No evidence of improvement in ventilatory function was found in these patients during the use of a mist tent; instead there was a small but significant decline in their ventilatory function. Home visits were made and bacterial contamination of mist tent equipment was noted in more than two-thirds of the tents in spite of careful cleaning instructions to the parents. The MEFV curve was found to be a simple yet sensitive test of evaluating lower airway obstruction in cystic fibrosis. (Author)

#### ABSTRACT 42581

EC 04 2581 ED N.A.  
Publ. Date 70 188p.  
Stacey, Margaret, Ed. and Others

##### Hospitals, Children and Their Families.

EDRS not available  
Routledge of America, 9 Park Street, Boston, Massachusetts 02108 (\$8.25).

Descriptors: exceptional child research; special health problems; hospitalized children; emotional problems; family attitudes; family characteristics; parent child relationship

Data were gathered on 32 4-year-old children prior to, during, and after their first hospitalization in the study of the social and psychiatric aspects of hospitalized children. The social research related socioeconomic status and family structure of the child in-patient to the visiting he receives, studied factors other than hospital regulations which inhibit living-in or visiting by the parents (such as family ties and attitudes toward child rearing and hospital treatment), and established the social relations of the child on the ward and his relationship to hospital staff and parents while hospitalized. The psychiatric aspect of the research, dealing with emotional disturbance caused by separation from the mother, investigated percentage of children affected, depth and duration of disturbance, varying vulnerability of children, and how children's need for their mother's presence varies with age. Implications of the findings for the administration of the hospital service are shown. (KW)

#### ABSTRACT 42587

EC 04 2587 ED N.A.  
 Publ. Date Feb 72 106p.  
 Bergsma, Daniel, Ed. and Others  
**Congenital Cardiac Defects; Recent Advances.**  
 EDRS not available  
 Williams and Wilkins Company, 428 East Preston Street, Baltimore, Maryland 21202 (\$12.00).

Descriptors: exceptional child research; special health problems; cardiac (person); medical research; medical evaluation; infancy; anomalies; medical treatment; pediatrics

Presented are 15 papers written primarily by pediatric cardiologists, dealing with recent advances in medical research and treatment related to congenital heart disease. Topics include historic aspects of congenital heart disease, problems of diagnosis and treatment of pulmonary vascular disease, coarctation of the aorta in the fetal and neonatal periods, and adjustments in the neonate and young infant to a congenital cardiac defect. Recent advances in diagnosis and management of the following three conditions in the young infant are discussed: total anomalous pulmonary venous return, transposition of the great arteries, and the syndrome of papillary muscle infarction and dysfunction. The operative and postoperative management of infants requiring cardiopulmonary bypass is detailed. Other papers present documented information and data from study of such problems as ventricular septal defects and congenital aortic stenosis. The final paper looks at the history of federal funding for medical research and training. (KW)

#### ABSTRACT 42620

EC 04 2628 ED N.A.  
 Publ. Date Sep 72 4p.  
 Feinberg, S. B.; Fisch, R. O.  
**Bone Changes in Untreated Neonatal Phenylketonuric Patients: A New Radiographic Observation and Interpretation.**

EDRS not available  
 Journal of Pediatrics; V81 N3 P540-3 Sep 1972

Descriptors: exceptional child research; diseases; physical development; medical evaluation; special health problems; phenylketonuria

It was reported that infants with phenylketonuria have altered bone growth patterns, during both the active growth period as previously described and in the neonatal period. The finding was thought to indicate that the altered bone development may begin in the intrauterine period, which was in turn thought to dispel the thought that it is purely a diet-related phenomenon. (CB)

#### ABSTRACT 42709

EC 04 2709 ED N.A.  
 Publ. Date Oct 72 4p.  
 Brown, Spencer F.; Erdle, Nancy F.  
**Weight Control for Handicapped Adolescents.**  
 EDRS not available  
 Rehabilitation Record; V13 N5 P27-30 Sep/Oct 1972

Descriptors: exceptional child research; physically handicapped; adolescents; dietetics; eating habits; body weight

A weight control study of 13 orthopedically handicapped adolescent subjects, including seven overweight persons and six controls, conducted at a residential rehabilitation facility was reported. The total push program involved individual dietary counseling, calorie intake limits, staff support, and a competitive element introduced by public charting of weekly gains and losses. Five of the seven obese patients lost weight. Strong motivations, especially toward increased ambulation, were found to account for much of the program's success. Suggestions for similar programs suitably modified for facilities offering only day care or individual therapy recommended measures such as enlisting the aid of every staff member and patient who comes in contact with the obese child, and allowing the child to choose his own weight reduction goal. (GW)

#### ABSTRACT 42817

EC 04 2817 ED N.A.  
 Publ. Date Mar 72 14p.  
 Roche, A. F. and Others  
**The Cranial Base in Trisomy 21.**  
 EDRS not available  
 Journal of Mental Deficiency Research; V16 N1 P7-20 Mar 1972

Descriptors: exceptional child research; physical development; physical characteristics; measurement; special health problems; diseases; anatomy; trisomy 21

Studied were 269 cephalometric radiographs of 131 individuals with confirmed trisomy 21, without translocation or mosaicism. Subjects ranged in age from 9 to 42 years. Most cranial base segments in the individuals studied were found not to elongate for as long as in normal children. Found to be markedly below normal values at all ages were the

mean cranial base lengths, particularly the nasion-sella. It was also reported that the mean endocranial diameters were smaller than normal and the cranial base flatter than normal. Another finding was that there were low levels of association among measures of cranial base length and shape, cranial vault size and the length and position of the hard palate. Canonical correlation coefficients between groups of these measures were reported to be statistically significant. Findings in general were discussed in relation to the determinants of cranial base size and shape. (CB)

#### ABSTRACT 42847

EC 04 2847 ED N.A.  
 Publ. Date Sep 72 8p.  
 Fishler, K. and Others  
**Intellectual and Personality Development in Children with Galactosemia.**  
 EDRS not available  
 Pediatrics; V50 N3 P412-9 Sep 1972

Descriptors: exceptional child research; intellectual development; personality development; therapy; special health problems; diseases; longitudinal studies; heredity; dietetics; galactosemia

The study deals with the developmental and intellectual status of 45 treated galactosemia patients, 23 females and 22 males, followed longitudinally for up to 23 years. Intellectual achievement, visual-perceptual ability, and electroencephalograph findings were analyzed. The intellectual status of the parents and unaffected siblings of the galactosemia patients were also considered. The findings indicated that the preschool age group of children showed the best developmental progress by the psychometric tests used, those of school age level scoring lower, but still within the low normal range. Adult patients demonstrated better intellectual achievement than the school age children, possibly due to a compensatory process. The greatest incidence of visual-perceptual difficulties was found in the school-age group, and remedial educational programs were necessary for some of these children. In each group, emotional-social characteristics were observed which may reflect the continuing nature of dietary restriction. The overall findings indicated that early treatment results in a more favorable outcome than does a delay in initiation of dietary restriction. (Author)

#### ABSTRACT 42851

EC 04 2851 ED N.A.  
 Publ. Date Sep 72 8p.  
 Hait, Gershon and Others  
**Insulin Suppression in Children with Congestive Heart Failure.**  
 EDRS not available  
 Pediatrics; V50 N3 P451-8 Sep 1972

Descriptors: exceptional child research; cardiac (person); medical treatment; dietetics; metabolism; special health problems; etiology

Children in congestive heart failure have impaired oral glucose tolerance tests. Suppression of insulin release appeared

to serve as a contributing mechanism for this abnormality in that an inverse relationship is observed between the severity of the congestive heart failure and the insulin response to hyperglycemia. Preliminary results also indicated significant increase in serum amino acid levels in these children. These findings suggested that the suppression of insulin release is the cause for inefficient utilization of carbohydrates and that this state of catabolism superimposed on a deficient diet encountered in these infants may contribute to their growth retardation. (Author)

#### ABSTRACT 50084

EC 05 0084 ED 067 801  
Publ. Date Jul 72 108p  
Pate, John E.

#### **The School Performance of Post-H. Influenza Meningitic Children. Final Report.**

National Center for Educational Research and Development (DHEW/OE), Washington, D. C.

EDRS mf,hc  
OEG-4-71-0019

Descriptors: exceptional child research; infectious diseases; elementary school students; academic achievement; special health problems; primary grades; intelligence quotient; student evaluation; meningitis

Reported was a project studying the school performance of children who had survived laboratory confirmed Haemophilus influenza meningitis prior to 4 years of age without observable sequelae and who were enrolled in regular primary grades. Thirty-nine index children were matched with controls by age, sex, socioeconomic level, and classroom membership, and 19 index cases were matched with primary controls on the basis of hospitalization at same age with non-meningitic illness, sex and race. Post-Haemophilus influenza children were found to perform significantly lower than controls on measures of school achievement, group IQ, and teacher rating. Recommended was a preschool intervention program for post-meningitic children which would offer special guidance in school readiness activities and in activities which increase instructional receptivity, student image, and motor coordination. (Author/GW)

#### ABSTRACT 50096

EC 05 0096 ED N.A.  
Publ. Date Oct 72 5p.  
Schaller, Jane

#### **Arthritis as a Presenting Manifestation of Malignancy in Children.**

EDRS not available

The Journal of Pediatrics; V81 N4 P793-7 Oct 72

Descriptors: exceptional child research; diseases; medical evaluation; medical case histories; special health problems; medical research; arthritis

Reported was a study of 13 children who had arthritis as an early sign of unrecognized malignancy. All children were referred for rheumatologic evaluation due to suspected rheumatic disease. Ten of

the 13 children were found to have leukemia of the acute lymphoblastic type. Affected joints were found to resemble rheumatic joints in swelling, warmth, and loss of motion; severe joint pain and tenderness were major complaints in nine of 10 patients. Also reported briefly were case studies of a 7-year-old girl with leukemia and arthritis and three additional patients with malignancies other than leukemia. The cases were thought to demonstrate the importance of considering leukemia and other malignancies in the differential diagnosis of arthritis in children. (CB)

#### ABSTRACT 50184

EC 05 0184 ED N.A.  
Publ. Date Oct 72 4p.  
Morse, Joan

#### **Aspiration and Achievement: A Study of One Hundred Patients with Juvenile Rheumatoid Arthritis.**

EDRS not available

Rehabilitation Literature; V33 N10 P290-303 Oct 1972

Descriptors: exceptional child research; aspiration; academic achievement; job satisfaction; special health problems; vocational interests; counseling effectiveness; state programs; rehabilitation; arthritis

Study of 100 patients (aged 12 years and above) with juvenile rheumatoid arthritis showed them to have high levels of educational and vocational aspiration and achievement. Current and past employment experiences were reviewed. School guidance and state rehabilitation services were found to have been helpful to some patients. However, also indicated was some lack of professional understanding that hampered counseling, discouraged students and clients, limited psychological growth, and led to detrimental physical stress. Recommended were improved understanding and communication among patients, medical center teams, and community educational and rehabilitation services. Case studies were cited to illustrate conclusions when appropriate. (Author/GW)

#### ABSTRACT 50236

EC 05 0236 ED N.A.  
Publ. Date Nov 72 5p.  
Rapier, Jacqueline and Others

#### **Changes in Children's Attitudes Toward the Physically Handicapped.**

EDRS not available

Exceptional Children; V39 N3 P219-23 Nov 1972

Descriptors: exceptional child research; physically handicapped; elementary school students; changing attitudes; peer acceptance; regular class placement; age differences; sex differences

An assessment was made of changes in attitude of 152 elementary school children toward orthopedically handicapped children as a result of an integrated school experience. After integration nonhandicapped children had developed a more positive attitude toward the orthopedically handicapped. Before integration boys and girls differed in attitudes, but the difference disappeared as

a result of integration. Integration increased differences in attitudes between older and younger children toward orthopedically handicapped children, with older children developing a more realistic attitude than younger children. (Author)

#### ABSTRACT 50502

EC 05 0502 ED 070 235  
Publ. Date Aug 72 92p.  
Heal, Laird W.

#### **Evaluating an Integrated Approach to the Management of Cerebral Palsy. Final Report. Volume I of IV.**

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

EDRS mf,hc

OEG-0-9-592149-4540(032)

Descriptors: exceptional child research; cerebral palsy; self care skills; training techniques; physically handicapped; childhood; program descriptions; perceptual motor coordination; socialization; cognitive development; physical therapy; conductive education

The Integrated Management of Cerebral Palsy (IMCP) project evaluated the effectiveness of a program of conductive education, which was said to involve training motorically disabled children in small, motivating groups of similarly handicapped peers to actively and voluntarily pursue those movements that are both incompatible with reflexes and functional in their self care applications. The project's 13 1/2 hour per day program stressed the development of functional movement, socialization, and academic skills for 10 children (aged from 6 to 14 years) having a measured IQ under 70. The IMCP Ss were compared with 15 conventionally trained (CT) Ss on three basic dimensions of behavioral competence: functional movements, socialization, and cognitive functioning. Data indicated that the CT Ss had higher initial scores on the functional movement variables and registered significantly greater gains on several of them, whereas IMCP Ss evidenced some regression on functional movement variables. On socialization variables the IMCP Ss were comparable to the CT Ss on their initial scores and registered significantly greater gains on two of the seven measures. On cognitive measures the CT Ss had higher initial scores, but both groups made comparable gains. (For related information, see also EC 050 503 through EC 050 505.) (Author/GW)

#### ABSTRACT 50503

EC 05 0503 ED 070 236  
Publ. Date Aug 72 313p.  
Heal, Laird W.

#### **Evaluating an Integrated Approach to the Management of Cerebral Palsy. Appendix A: IMCP Documentation Handbook. Final Report. Volume II of IV.**

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

EDRS mf,hc

OEG-0-9-592149-4540(032)



Descriptors: exceptional child research; cerebral palsy; training techniques; self care skills; physically handicapped; childhood; curriculum guide; education programs; program descriptions; teaching guides; conductive education

The appendix is a guide to the curriculum and training procedures of the Integrated Management of Cerebral Palsy project which evaluated the effectiveness of a program of conductive education. Introductory sections provide an overview of conductive education (training motorically disabled children in small, motivating groups of similarly handicapped peers to actively and voluntarily pursue those movements that are both incompatible with reflexes and functional in their self care applications), the definition of special terms, and the detailed description of special equipment. The project's daily calendar serves as the table of contents for the documentation entries that form the remainder of the book. Each activity listed on the calendar is associated with a letter-digit code which directs readers to a section which explains the activity in detail. Activities such as the following are covered: academic instruction, bathing, hand washing, dressing, eating, group games, exercises for the hands and arms, drinking, bedtime activities, exercises for developing gross motor skills, standing, and walking. Where appropriate, descriptions of activities include accompanying verbal instructions, rationale and functional applications for the activity, and adaptations of the activity for individuals. (For related information, see also EC 050 502, EC 050 504, and EC 050 505.) (Author/GW)

#### ABSTRACT 50504

EC 05 0504 ED 070 237  
Publ. Date Aug 72 63p.  
Heal, Laird W.

**Evaluating an Integrated Approach to the Management of Cerebral Palsy. Appendix B: Field Test Report of the Eau Claire Functional Abilities Test and the Wolfe-Bluel Socialization Inventory. Final Report Vol. III of IV.**

Wisconsin University, Eau Claire (DHEW/OE), Washington, D. C.  
EDRS mf,hc  
OEG-0-9-592149-4540(032)

Descriptors: exceptional child research; cerebral palsy; socialization; testing; physical development; physically handicapped; test reliability; test validity; self care skills; training techniques; conductive education

The appendix examined the measurement instruments developed in the course of the Integrated Management of Cerebral Palsy project to measure functional movements and socialization skills of severely handicapped nonambulatory cerebral palsied children who had limited speech. The field test sample consisted of 51 cases for the Eau Claire Functional Abilities Test (ECFAT) and 49 cases for the Wolfe-Bluel Socialization Inventory (WBSI). The ECFAT was found to provide a comprehensive coverage of motor

skills involved in daily tasks (such as sitting, standing, walking, eating, writing, and dressing) and to evidence high test-retest reliability. The WBSI consisted of 62 items organized along the following seven subscales: self care, environmental orientation, independence, communication, emotional maturity, group interaction, and intellectual growth. Both instruments were found to have validity, comprehensive scope, and outstanding reliability. Functional ability charts for the ECFAT were included. (For related information, see also EC 050 502, EC 050 503, and EC 050 505.) (GW)

#### ABSTRACT 50505

EC 05 0505 ED 070 238  
Publ. Date Aug 72 18p.  
Heal, Laird W.

**Evaluating an Integrated Approach to the Management of Cerebral Palsy. Appendix C: An Analysis of the Evaluation and Follow-up Data from the Institute for Movement Therapy in Budapest, Hungary. IV of IV.**

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

EDRS mf,hc  
OEG-0-9-592149-4540(032)

Descriptors: exceptional child research; cerebral palsy; program evaluation; follow-up studies; training techniques; physically handicapped; physical therapy; self care skills; conductive education

The appendix analyzed evaluation and followup data from the Institute for Movement Therapy whose procedures the Integrated Management of Cerebral Palsy project attempted to replicate. Examined were data from over a 15 year period for 866 patients treated for a broad range of motoric disabilities. Data concerned independence in eating, dressing, writing, change of place, speech comprehension and speech production, and manual dexterity in self-care motor tasks. Analyses showed that significant and lasting gains were made in all the areas during the time patients were at the Institute. Followup data showed significant regression only in the areas of eating, dressing and change of place, and significant improvement in writing. Data were presented in table format. (For related information, see also EC 050 502 through EC 050 504.) (Author/GW)

#### ABSTRACT 50532

EC 05 0532 ED N.A.  
Publ. Date 72 156p.

**Studies in Hydrocephalus and Spina Bifida.**

EDRS not available  
J. B. Lippincott Company, East Washington Square, Philadelphia, Pennsylvania 19105 (\$6.00).  
Proceedings of the Society for Research Into Hydrocephalus and Spina Bifida, Rotterdam, 28th June-1st July 1972.

Descriptors: exceptional child research; physically handicapped; special health problems; diseases; medical research; conference reports; hydrocephalus; spina bifida

Twenty-two research reports plus 10 summaries of other papers given at a meeting of the Society for Research into Hydrocephalus and Spina Bifida considered the following topics among others: dynamic aspects of cerebrospinal fluid, craniospinal dysraphia in the chick embryo produced by tissue-specific antibodies, clinical implications of cord lesions in neurospinal dysraphism, the medical management of hydrocephalus, the treatment of urinary candidosis with the oral antifungal drugs 5-fluorocytosine and clotrimazole, and autoradiographic study of induced myelomeningocele, the use of isosorbide in the treatment of hydrocephalus, status of the musculature in myelodysplasia of the rat, assessments of aptitudes in young people of school-leaving age handicapped by hydrocephalus or spina bifida cystica, morphology of peripheral nerves in children with spina bifida, the spring implant operation, the ability and attainments of spina bifida patients born in South Wales between 1956-1962, hydrodynamics of Holter ventriculoatrial shunt systems under various conditions. Summaries of ten other relevant papers are also given. (DB)

#### ABSTRACT 50442

EC 05 0442 ED N.A.  
Publ. Date Dec 72 4p.

Schaller, Jane; Wedgwood, Ralph J.  
**Juvenile Rheumatoid Arthritis: A Review.**

EDRS not available  
Pediatrics; V50 N6 P940-53 Dec 1972

Descriptors: exceptional child research; diseases; clinical diagnosis; medical evaluation; special health problems; medical case histories; arthritis

Reported were clinical manifestations of 124 children with juvenile rheumatoid arthritis (mean duration of disease, 7.5 years). Three distinct subgroups of disease were distinguished by their clinical manifestations, prognosis for joint disability, types of extra-articular complications and serologic findings. Systemic disease, characterized by high intermittent fevers and rheumatoid rash as well as other systemic manifestations, occurred in 32 of 124 patients (26%). All patients also had polyarthritis, generally beginning during the first 6 months of disease. More boys (18) than girls (14) were affected. No patient had iridocyclitis or positive tests for antinuclear antibodies or rheumatoid factor. Systemic symptoms alone were not a cause of permanent morbidity, but eight of 32 patients incurred severe joint disability. Polyarticular disease unassociated with prominent systemic disease occurred in 46 of 124 patients (37%), predominantly girls (38 girls, eight boys). Multiple joints were involved, characteristically including small hand joints. Ten patients had antinuclear antibodies; six had positive latex agglutination tests for rheumatoid factor. Eight of 46 had severe joint disability. Persistent pauciarticular disease, characterized by arthritis limited to five or fewer joints, occurred in 46 of 124

patients (37%), predominantly girls (34 girls, 12 boys). Large joints were chiefly affected (knees, ankles, elbows); small hand joints were spared. Nine of 46 patients had antinuclear antibodies. No patient had severe joint disability, but 12 of 46 had iridocyclitis and 10 offered some degree of permanent visual damage. (Author)

**ABSTRACT 50483**

EC 05 0483

Publ. Date Jan 73

Simell, O. and Others

ED N.A.

4p.

**Enzyme Defect in Saccharopinuria.**

EDRS not available

Journal of Pediatrics: V82 N1 P54-7 Jan 1973

Descriptors: exceptional child research; special health problems; diseases; medical case histories; multiply handicapped; mentally handicapped; metabolism; Saccharopinuria

Presented was the medical case history of a 4 year old female suffering from

saccharopinuria, a newly found disorder of lysine metabolism in man. The metabolic defect, localized in the main degradative pathway of lysine, was determined with cultured fibroblasts from the patient who evidences spastic diplegia and mental retardation. The activity of the saccharopine degrading enzyme (aminoadipic semialdehyde-glutamate reductase) in the patient was found to be about 40% of that present in two control Ss. (GW)



## AUTHOR INDEX

- Aas, Kjell 33068.  
 Bachmann, Winnie H 41626.  
 Bagley, Christopher 32915, 40777.  
 Barbe, Walter B 10919.  
 Barry, John R and Others 20603.  
 Bergman, Abraham B and Others 42123.  
 Bergsma, Daniel, Ed and Others 42587.  
 Birch, Jack W 40757.  
 Block, J R and Others 32232.  
 Brieland, Donald 10704.  
 Brown, Spencer F 42709.  
 Cohen, Matthew 42483.  
 Coss, Joe Glenn and Others 22765.  
 Dancis, Joseph and Others 42325.  
 Deschin, Celia S 31784, 32228-32229.  
 Diller, Leonard and Others 21469.  
 Drash, Philip W 11481.  
 Erdle, Nancy F 42709.  
 Fair, Dennis T 40757.  
 Fassler, Joan 22214, 30471.  
 Feinberg, S B 42628.  
 Feldman, Martin A 22027.  
 Fiddes, D O 32567.  
 Fisch, R O 42628.  
 Fischer, Margaret 40772.  
 Fishler, K and Others 42847.  
 Fishman, Sidney 10063.  
 Force, Dewey G, Jr 10086.  
 Friedman, C Jack 32892.  
 Friedman, Ronald J 31719.  
 Gardner, Iytt I, Ed 33100.  
 Gertenrich, Roger I, 20108.  
 Goldin, George J and Others 40879.  
 Hait, Geishon and Others 42851.  
 Haskell, Simon H 11029.  
 Heal, Laird W 50502-50505.  
 Hersher, Betsy 32661.  
 Hicks, John 32376.  
 Hoffman, Thomas 42318.  
 Horowitz, Mardi J 31629.  
 Hutchinson, Jack 22109.  
 Jordan, John E 20866.  
 Katz, Alfred H 21339.  
 Kaufman, Richard V 32661.  
 Kay, Hector W 10063.  
 Kinnane, John F 23244.  
 Kolin, Irving S and Others 32337.  
 Kotok, David 40724.  
 Kreindler, A 31808.  
 Lamarre, Andre and Others 42486.  
 Lazerson, Jack 42327.  
 Love, Nash W, Jr 30855.  
 Love, Russel W 21493.  
 MacQueen, John C 31719.  
 Masland, Richard L, 22556.  
 McCann, Cairbre 10058.  
 Money, John 11481.  
 Morse, Joan 50184.  
 Motoyama, E K and Others 42487.  
 Muthard, John E 22109.  
 Nash, Marygold V 31784.  
 Nhan, Nguyen 42297.  
 Pate, John E 31001, 50084.  
 Pinkel, Donald and Others 42482.  
 Pless, Ivan B 32973.  
 Pringle, M.J. Kellmer 32567.  
 Prisuta, Richard 31781.  
 Rapier, Jacqueline and Others 50236.  
 Riley, Olga M 30011.  
 Robb, Preston 10918.  
 Roche, A F and Others 42817.  
 Roghmann, Klaus J 32973.  
 Roskies, Ethel 41239.  
 Rowe, Richard D 42318.  
 Rusk, Howard A and Others 20922.  
 Sareen, Chandra K and Others 40845.  
 Sattler, Jerome M 32581.  
 Schaller, Jane 50096, 50442.  
 Schlesinger, Lawrence E 42297.  
 Schmidt, Paul and Others 20856.  
 Semmel, Melvyn I 21311.  
 Shepherd, Clyde W, Jr 20337.  
 Sibinga, Maarten S 32892.  
 Siller, Jerome and Others 21448.  
 Simell, O and Others 50483.  
 Smith, David W 31282.  
 Stacey, Margaret, Ed and Others 42581.  
 Suziedelis, Antanas 3244.  
 Swack, Myron J 10701.  
 Swinyard, Chester A, Ed 30358.  
 Tan, Kim-Leong 42391.  
 Tozier, Leonard L, 32581.  
 Urie, Robert M and Others 42349.  
 Vernon, McCay 22977.  
 Wedgwood, Ralph J 50442.  
 Wieder, Daniel 32376.  
 Wolinsky, Gloria 30483.  
 Yuker, Harold E 22027.

## SUBJECT INDEX

- APRI, Sierra Child Size Model Number  
 1 Hand 10063.  
 Academic Achievement 21469, 31001,  
 32567, 32973, 42349, 50084, 50184.  
 Acceleration 10919.  
 Achievement 10919.  
 Adjustment (to Environment) 20856,  
 23244.  
 Adjustment Problems 22109.  
 Administration 10919, 10937, 20856.  
 Administrator Attitudes 20866.  
 Adolescents 10058, 22765, 30011, 32661,  
 40879, 42709, 50502-50503.  
 Adults 10058, 10704, 20922.  
 Advanced Placement 10919.  
 Age 23244.  
 Age Differences 11481, 21493, 50236.  
 Allergy 33068.  
 Amputees 10063, 21448, 21469.  
 Anatomy 42817.  
 Ancillary Services 20859.  
 Anomalies 30358, 31282, 32337, 41239,  
 42391, 42587.  
 Anxiety 23244.  
 Arithmetic 11029, 21469, 22765.  
 Arthritis 50096, 50184, 50442.  
 Articulation (Speech) 21493.  
 Aspiration 50184.  
 Asthma 33068.  
 Attendance 42327.  
 Attention Span 11029.  
 Attitude Tests 21448.  
 Attitudes 10086, 10704, 10919, 20866,  
 21311, 21448, 23244.  
 Auditory Perception 30471.  
 Aural Stimuli 21493, 22214, 30471.  
 Aurally Handicapped 20859, 22977,  
 23244, 31781.  
 Behavior Change 11481.  
 Behavior Patterns 32915, 40777.  
 Behavior Problems 11481, 32973, 40777.  
 Behavior Rating Scales 20856, 32229.  
 Bibliographies 40772.  
 Biochemistry 10918, 40845.  
 Blind 21448.  
 Blood Circulation 21339.  
 Body Image 32661.  
 Body Weight 42709.  
 Cardiac (Persons) 23244, 42318, 42587,  
 42851.  
 Cardiovascular System 21339.  
 Case Studies (Education) 20108, 20859.  
 Cerebral Palsy 10058, 11029, 20108,  
 21493, 22109, 22214, 22977, 30471,  
 30855, 32376, 42581, 41626, 50502-  
 50505.  
 Changing Attitudes 50236.  
 Child Development 32376, 40724.  
 Child Rearing 41239.  
 Childhood 10058, 10063, 50502-50503.  
 Classification 10918.  
 Clinical Diagnosis 10918, 10937, 20856,  
 22977, 40845, 50442.  
 Cognitive Development 50502.  
 Cognitive Processes 22214.  
 College Attendance 22109.  
 College Students 42349.  
 Communication Problems 10058, 32892.  
 Communication (Thought Transfer)  
 10058.  
 Community Attitudes 40879.  
 Community Programs 20859.  
 Comprehensive Family Rating 32229.  
 Conductive Education 50502-50505.  
 Conference Reports 30866, 50532.  
 Continuation Education 20599.  
 Cooperative Programs 20859.  
 Cosmetic Prostheses 10063.  
 Counseling Effectiveness 32376, 50184.  
 Counseling Services 20922.  
 Creativity 10919.  
 Cultural Factors 20866.  
 Curriculum Development 22027.  
 Curriculum Guides 50503.  
 Cystic Fibrosis 42486-42487.  
 Death 42123.  
 Delinquents 20599.  
 Demography 21448.  
 Demonstration Projects 20856, 20922,  
 32228-32229, 42349.

Diabetes 32661.  
 Diets 42709, 42847, 42851.  
 Disadvantaged Youth 20599.  
 Disease Control 33068.  
 Diseases 33100, 40772, 42123, 42318, 42325, 42482-42483, 42486-42487, 42628, 42817, 42847, 50096, 50442, 50483, 50532.  
 Dorrance Number 10X Hook 10063.  
 Dropouts 20599.  
 Early Admission 10919.  
 Eating Habits 42709.  
 Educable Mentally Handicapped 30011.  
 Education 20866.  
 Educational Attitudes 20866.  
 Educational Background 10704, 32892, 41626.  
 Educational Equipment 20108, 22027.  
 Educational Needs 20599, 22027, 32567.  
 Educational Programs 22027, 50503.  
 Educational Research 22027.  
 Educational Strategies 10919.  
 Educational Trends 30483.  
 Electromechanical Aids 10058.  
 Elementary and Secondary Education Act Title III Project 20859.  
 Elementary School Students 10086, 50084, 50236.  
 Embryology 30358.  
 Emotional Adjustment 21339, 32337, 32376, 32567, 32661, 41239.  
 Emotional Problems 11029, 30358, 31719, 32973, 40777, 42297, 42581.  
 Emotionally Disturbed 20599, 20856, 20859, 30011, 31629, 32973, 40777.  
 Employment 21339.  
 Employment Experience 20922, 41626.  
 Employment Level 10704.  
 Employment Opportunities 20599, 22109.  
 Employment Potential 30011.  
 Employment Problems 21339.  
 Employment Services 20922.  
 Endocrine Glands 33100.  
 Enrichment Programs 10919.  
 Environment 23244.  
 Environmental Influences 10919, 40724.  
 Epidemiology 32973.  
 Epilepsy 10086, 10918, 20856, 31629, 31808, 32915, 40777, 40879, 42297.  
 Equipment Utilization 20108.  
 Etiology 10918, 10937, 11481, 22977, 33068, 42123, 42851.  
 Evaluation 20856.  
 Exceptional Child Education 10919.  
 Exceptional Child Research 10058, 10063, 10086, 10701, 10704, 10918, 10937, 11029, 11481, 20108, 20337, 20599, 20603, 20856, 20859, 20866, 20922, 21311, 21448, 21469, 21493, 22027, 22109, 22214, 22556, 22765, 22977, 23244, 30011, 30358, 30471, 30483, 30855, 30866, 31001, 31282, 31629, 31719, 31781, 31784, 31808, 32228-32229, 32232, 32337, 32376, 32567, 32581, 32661, 32892, 32915, 32973, 33100, 40724, 40757, 40772, 40777, 40845, 40879, 41239, 41626, 42123, 42297, 42318, 42325, 42327, 42349, 42391, 42482-42483, 42486-42487, 42581, 42587, 42628, 42709, 42817, 42847, 42851, 50084, 50096, 50184, 50236, 50442, 50483, 50502-50505, 50532.  
 Exceptional Child Services 33068.  
 Experimental Programs 10919.  
 Factor Analysis 21448.  
 Family Attitudes 22337, 32915, 42581.  
 Family Characteristics 42581.  
 Family Influence 32229, 40879.  
 Family Problems 32229.  
 Family Relationship 21339.  
 Family (Sociological Unit) 10919, 32229.  
 Fantasy 32661.  
 Females 42483.  
 Florida 20603.  
 Followup Studies 10704, 20603, 20856, 31781, 50505.  
 Foreign Countries 20866.  
 Galactosemia 42847.  
 Genetics 10918, 30358, 31282, 33100, 40845.  
 Gifted 10919.  
 Goodwill Industries 20856.  
 Group Counseling 20922.  
 Group Membership 20866.  
 Group Relations 31784.  
 Grouping (Instructional Purposes) 10919.  
 Guidelines 42349.  
 Handicapped 31781.  
 Handicapped Children 21311, 32581.  
 Handwriting 20108.  
 Handwriting Skills 20108.  
 Hemophilia 21339, 42327.  
 Heredity 11481, 21339, 42391, 42847.  
 High School Graduates 10704.  
 Home Visits 42487.  
 Hospital Schools 10704.  
 Hospitalized Children 42581.  
 Hydrocephalus 50532.  
 Hypert thyroidism 11481.  
 Identification 10919, 11481, 42486.  
 Incidence 10086, 10918, 11481, 21339, 30358, 30855, 31719.  
 Individual Characteristics 10919, 21469.  
 Individualized Instruction 10937.  
 Infancy 42123, 42587.  
 Infants 42318.  
 Infectious Diseases 10918, 50084.  
 Institutionalized (Persons) 40845.  
 Intellectual Development 32567, 42847.  
 Intelligence 20337, 21469.  
 Intelligence Differences 21469.  
 Intelligence Factors 10919.  
 Intelligence Level 31001.  
 Intelligence Quotient 21493, 32581, 50084.  
 Intelligence Tests 32581.  
 Interdisciplinary Approach 30866.  
 Internal Scaling 21448.  
 Interpersonal Problems 23244.  
 Interpersonal Relationship 23244.  
 Intervention 32376.  
 Interviews 31781.  
 Item Analysis 21448.  
 Job Placement 20856, 20922.  
 Job Satisfaction 50184.  
 Kansas 20859.  
 Laborers 20866.  
 Language Development 40724.  
 Lead Poisoning 40724.  
 Learning Characteristics 10919, 22214.  
 Learning Difficulties 31001.  
 Learning Disabilities 11029, 20859.  
 Leisure Time 21339, 40757.  
 Leukemia 42482.  
 Limb Deformities 30358.  
 Longitudinal Studies 41239, 42483, 42847.  
 Low Ability Students 20599.  
 Males 21339.  
 Managerial Occupations 20866.  
 Manpower Development 31781.  
 Maple Syrup Urine Disease 42325.  
 Marriage 10704.  
 Mathematics 11029.  
 Measurement 42817.  
 Measurement Techniques 32228.  
 Medical Case Histories 33068, 50096, 50412, 50483.  
 Medical Evaluation 30866, 32232, 33068, 33100, 40772, 42318, 42325, 42486, 42587, 42628, 50096, 50442.  
 Medical Research 10918, 11481, 22556, 30358, 31808, 40845, 42318, 42325, 42391, 42482-42483, 42486-42487, 42587, 50096, 50532.  
 Medical Services 20922.  
 Medical Treatment 10918, 21339, 30358, 30866, 31629, 33068, 33163, 40772, 42327, 42482-42483, 42487, 42587, 42851.  
 Memory 22214.  
 Meningitis 31091, 50084.  
 Meningomyelocoele 32337.  
 Mental Health 31784.  
 Mentally Handicapped 20599, 20856, 20859, 21311, 31719, 40845, 42391, 50483.  
 Metabolism 33100, 40845, 42325, 42851, 50483.  
 Metopic Fontanelle 42391.  
 Middle Aged 20599.  
 Minority Groups 20599.  
 Mongolism 42391.  
 Mother Attitudes 41239.  
 Mothers 41239.  
 Motivation 20603.  
 Motor Development 30866, 40724.  
 Motor Reactions 22214.  
 Multiply Handicapped 20856, 22977, 30855, 31719, 40845, 42297, 50483.  
 National Surveys 21339.  
 Negative Attitudes 10086, 21448.  
 Neurological Defects 10086, 31808, 32915, 40777.  
 Neurologically Handicapped 10086, 10918, 31629, 32376, 32915.  
 New York 32228-32229.  
 New York City 10063.  
 Occupations 23244.  
 Occupational Surveys 20922.  
 Ohio 31781.  
 Older Adults 20599.  
 Orthopedically Handicapped 10701, 10704, 20922, 30483.  
 Parent Attitudes 32337, 32376, 40879.  
 Parent Child Relationship 41239, 42581.  
 Parent Counseling 32376.  
 Parent Education 32892, 33068.  
 Parent Role 21339.  
 Pathology 10918.  
 Pediatrics 32892, 32973, 33100, 42123, 42318, 42587.  
 Peer Acceptance 50236.  
 Peer Relationship 31001, 31784.  
 Perception 30471.  
 Perceptual Development 20337.  
 Perceptual Motor Coordination 20337, 50502.  
 Perceptual Motor Learning 11029.  
 Personal Adjustment 20856, 30866, 31001, 40879.  
 Personality 20603, 21469, 23244.  
 Personality Development 42847.  
 Personality Theories 30483.  
 Personnel Selection 22027.  
 Phenylketonuria 32892, 40772, 42628.  
 Physical Characteristics 11481, 31001, 41626, 42817.  
 Physical Development 42628, 42817, 50504.  
 Physical Education 10937.  
 Physical Examinations 32232.  
 Physical Fitness 10937.

Physical Therapy 10701, 50502, 50505.  
 Physically Handicapped 10058, 10063, 10701, 10704, 10937, 11029, 20108, 20599, 20603, 20856, 20859, 20866, 20922, 21311, 21448, 21469, 22027, 22109, 22214, 22556, 22765, 23244, 30011, 30358, 30483, 30855, 30866, 31282, 31719, 31781, 31784, 32228-32229, 32232, 32337, 32567, 40757, 40845, 41239, 41626, 42349, 42709, 50236, 50502-50505, 50532.  
 Physicians 32892.  
 Physiology 32232.  
 Prevention 22556.  
 Prevocational Education 30011.  
 Primary Grades 50084.  
 Professional Personnel 20859, 20866.  
 Program Descriptions 50502-50503.  
 Program Evaluation 10937, 20859, 22027, 32376, 50505.  
 Programed Instruction 10701, 11029, 22765.  
 Prostheses 10063, 10701, 21469, 30358.  
 Psycholinguistics 21469.  
 Psychological Characteristics 11481, 31001, 40777.  
 Psychological Evaluation 20603, 23244.  
 Psychological Tests 23244.  
 Psychophysiology 31629.  
 Public Education 31781.  
 Quadriplegia 20922.  
 Questionnaires 10086.  
 Rating Scales 10937, 20866, 21311.  
 Reading Achievement 20337, 21469.  
 Recall (Psychological) 30471.  
 Recreational Programs 31784.  
 Reference Books 31282.  
 Regular Class Placement 50236.  
 Rehabilitation 20603, 40879, 50184.  
 Religious Factors 20866.  
 Remedial Programs 10937.  
 Research Methodology 42297.  
 Research Needs 30483, 42297.  
 Research Reviews (Publications) 10918, 11029, 22027, 32581, 40772, 40777, 42482.  
 Research Utilization 30483.  
 Residential Programs 42297.  
 Resource Centers 20859.  
 Role Theory 30483.  
 St. Paul 10086.  
 Saccharopinuria 50483.  
 Schedule of Interpersonal Concerns 23244.  
 School Design 22027.  
 Seizures 10086, 10918, 32915.  
 Self Care Skills 50502-50505.  
 Secondary School Students 10086.  
 Self Concept 10704, 20603, 21339, 31784, 32228, 32661.  
 Self-Image Evaluation 32228.  
 Sensory Training 21493.  
 Sex Differences 20866, 21493, 50236.  
 Sheltered Workshops 20856.  
 Small Schools 20599.  
 Social Adjustment 23244, 32337, 32567, 40879.  
 Social Attitudes 20603, 32915.  
 Social Characteristics 21339, 40777.  
 Social Factors 21469.  
 Social Influences 32915.  
 Social Psychology 40777.  
 Social Relations 10704.  
 Social Work 32228-32229.  
 Socialization 50502, 50504.  
 Socially Maladjusted 32973.  
 Socioeconomic Influences 20866.  
 Socioeconomic Status 20599.  
 Special Classes 10937, 20859.  
 Special Education Teachers 20866.  
 Special Health Problems 10086, 10918, 10937, 11481, 20337, 21339, 23244, 30866, 31001, 32232, 32661, 32892, 32915, 32973, 33068, 33100, 40724, 40772, 40777, 40879, 42123, 42297, 42318, 42325, 42327, 42391, 42482-42483, 42486-42487, 42581, 42587, 42628, 42817, 42847, 42851, 50084, 50096, 50184, 442, 50483, 50532.  
 Special Services 20922.  
 Speech 10704.  
 Speech Handicapped 21493.  
 Speech Improvement 21493.  
 Speech Tests 21493.  
 Speech Therapy 21493.  
 Spina Bifida 30866, 50532.  
 Staff Role 10937.  
 State Programs 50184.  
 Statistical Data 42349.  
 Statistical Surveys 20922.  
 Stereotypes 10086, 21311, 21448.  
 Stress Variables 32232.  
 Student Adjustment 42349.  
 Student Evaluation 20859, 50084.  
 Student Participation 42349.  
 Student Placement 21469.  
 Student Teachers 10701.  
 Student Volunteers 42349.  
 Sudden Infant Death Syndrome 42123.  
 Supervisors 20856.  
 Task Performance 22214, 30471.  
 Teacher Attitudes 10086, 20866.  
 Teacher Education 10701.  
 Teacher Qualifications 10937.  
 Teaching Guides 50503.  
 Teaching Machines 22765.  
 Test Construction 21448, 23244, 32228-32229.  
 Test Interpretation 40757.  
 Test Reliability 32232, 32581, 50504.  
 Test Validity 32238, 32229, 50504.  
 Testing 20859, 21311, 50504.  
 Testing Problems 32581, 40757.  
 Tests 23244.  
 Textbooks 33100.  
 Thalidomide 30358.  
 Thalidomide Children 32567, 41239.  
 Therapy 30866, 42847.  
 Thyrotoxicosis 11481.  
 Training 21493.  
 Training Techniques 50502-50505.  
 Transportation 22027.  
 Trisomy 21 42817.  
 Tuberculous Sclerosis 40845.  
 Underachievers 20599, 20859.  
 Urinary Tract 42483.  
 Values 20866.  
 Verbal Stimuli 21493.  
 Veterans Administration Center (Bay Fines, Florida) 20603.  
 Visual Perception 20337.  
 Visual Stimuli 21493.  
 Visually Handicapped 23244, 31781.  
 Vocational Adjustment 20856, 20922, 41626.  
 Vocational Counseling 20856, 21339.  
 Vocational Education 20599, 30011, 31781.  
 Vocational Interests 50184.  
 Vocational Rehabilitation 20603, 20856, 20922, 30011.  
 Wichita 20859.  
 Work Attitudes 20603.  
 Workshops 20856.  
 Young Adults 41626.

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