The annotated bibliography on Hyperactivity--Drug Therapy/Food Additives/Allergies contains approximately 65 abstracts and associated indexing information for documents or journal articles published from 1968 to 1975 and selected from the computer files of the Council for Exceptional Children's Information Services and the Education Resources Information Center (ERIC). It is explained that titles were chosen in response to user requests and analysis of current trends in the field. Abstracts include bibliographic data (identification or order number, publication date, author, title, source or publisher, and availability); descriptors indicating the subject matter covered; and a summary of the document's contents. Also provided are instructions for using the bibliography, a list of journals from which articles were abstracted, and an order form for ordering microfiche or paper copies of the documents through the ERIC Document Reproduction Service. (JM)
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2. Descriptors indicate the subject matter of the document.

3. The summary provides a comprehensive overview of document contents and, in some cases, availability is announced here.

ABSTRACT 56

EC 080056
Pub. Date Jan 75
Wolf, Lucile C.
Whitehead, Paul C.
The Decision to Institutionalize Retarded Children: Comparison of Individually Matched Groups. Mental Retardation; Vol 13 NS P3-7 Oct 1975
Descriptors: Mentally Handicapped*; Placement*; Institutions*; Exceptional Child Research; Family Influence; Decision Making
A group of 24 institutionalized retarded children was individually matched on the basis of sex, socio economic status, IQ and American Association on Mental Deficiency diagnostic category, with a group of 24 retarded children who remained at home. Results indicated that the sex of the child and the amount of disruption perceived by the family as caused by the child are significant factors in determining the course of institutionalization. (Author)

No ERIC accession number available; i.e., document is not available through ERIC

ABSTRACT 34

EC 080034
Pub. Date 75
Brown, Jerome D., Ed.
Handbook for Hearing Conservation Services and Educational Programming for Hearing Impaired Pupils, Iowa State Dept. of Public Instruction, Des Moines.
EDRS mf,hc
Descriptors: Aurally Handicapped*; Guidelines*; Educational Programs*; State Programs*; Hearing Conservation; Exceptional Child Education; Elementary Secondary Education; Administration; State Departments of Education; Identifier: Iowa*
Presented by the Iowa Department of Public Instruction are recommendations for comprehensive hearing conservation services and educational programming for hearing impaired (HI) pupils. Part I consists of Iow of Special Education which are arranged under 10 divisions: authority, scope, general principles and ... regarding audiometric symbols, identification audiology and audiology programs in educational settings for HI children. (Author)

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Publication date
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Abstractor's initials
The CFC Information Center regularly receives more than 200 journals which are examined for material concerning exceptional children. Articles judged to meet established criteria are abstracted, indexed and published in Exceptional Child Education Abstracts (ECEA). Some of these articles are indexed and submitted also for announcement in Current Index to Journals in Education (CIJE), and an Educational Resources Information Center (ERIC) publication. The following list (current May 1976) is representative of journals currently received.

- Behavioral Therapy, 111 Fifth Avenue, New York, New York 10003
- Behavior Today, Ziff-Davis Publishing Co., 1156 15th Street NW, Washington DC 20036
- Behavioral Disorders, Council for Children with Behavioral Disorders, Indiana University, Bloomington, Indiana 47404
- British Journal of Disorders of Communication, 4345 Annandale Street, Edinburgh EH 4 AT, Scotland
- British Journal of Mental Subnormality, Mohnyhill Hospital, Birmingham B30 3QG, England
- British Journal of Physical Education, 10 Nottingham Place, London W1 4AX, England
- Bulletin of the Otone Society, 8415 Belknap Lane, Suite 204, Towson, Maryland 21204
- Bureau Memorandum, 126 Long Island Street, Madison, Wisconsin 53702
- CSMR Bulletin, 343 Campus Towers, Edmonston, Alabama, Canada
- Canada's Mental Health, Information Canada, Ottawa K1A 0S9, Canada
- CEDR Quarterly, Phi Delta Kappa, PO Box 389, Bloomington, Indiana 47404
- Child Care Quarterly, 2852 Broadway, Morningside Heights, New York 10025
- Child Development, 5730 Ellis Avenue, Chicago, Illinois 60617
- Child Psychiatry & Human Development, 2852 Broadway, Morningside Heights, New York 10025
- Child Welfare, 67 Irvine Place, New York, New York 10003
- Childhood Education, 3615 Wisconsin Avenue NW, Washington DC 20016
- Children's House, Box 111, Caldwell, New Jersey 07006
- Colorado Journal of Educational Research, University of Northern Colorado, Greeley, Colorado 80631
- Communication Education (formerly Speech Teacher), Speech Communication Association, Slater Hilton Hotel, New York, New York 10001
- Compact, 360 Lincoln Tower, 1860 Lincoln Street, Denver, Colorado 80203
- Day Care & Early Education, 2852 Broadway, New York, New York 10025
- Deaf American, 5125 Radnor Road, Indianapolis, Indiana 46226
- Defective Mental/Mental Retardation, York University, 4700 Keele Street, Downsview, Ontario M3J 1P3, Canada
- Developmental Medicine and Child Neurological Specialized International Medical Publications 20-22 Maittomer Street, London W1, England
- Devotex Forum, 19 South Waterhoo Road, Devon, Pennsylvania 19333
- DSII Abstracts, Gallaudet College, Washington, DC 20002
- Dyslexia Review, The Dyslexia Institute, 133 Gresham Road, Staines, TW18 2AI, England
- Education and Training of the Mentally Retarded, 1920 Association Drive, Reston, Virginia 22091
- Education Digest, PO Box 623, 416 Longsaddle Drive, Ann Arbor, Michigan 48105
- Education of the Visually Handicapped, 919 Walnut St, Fourth Floor, Philadelphia, Pennsylvania 19107
- Educational & Psychological Measurement, Box 6907, College Station, Ditham, North Carolina 27704
- Educational Forum, 334 Atymology Building, University of Illinois, Champaign, Illinois 61820
- Educational Horizons, 2000 East 8th Street, Bloomington, Indiana 47401
- Educational Leadership, 1201 16th Street NW, Washington DC 20036
- Educational Researcher, 1126 16th Street NW, Washington DC 20036
- Educational Technology, 140 Sylvan Avenue, Endwood Flches, New Jersey 07632
- Elementary School Journal, 5801 Ellis Avenue, Chicago, Illinois 60637
- English Journal, 1111 Kenton Road, Urbana, Illinois 61801
- Exceptional Children, 1920 Association
- Exceptional Parent, 204 Beacon Street, Boston, Massachusetts 02116
- Family Involvement, Canadian Education Program, 41 Madison Avenue, Toronto, Ontario MOS 252, Canada
- Focus on Exceptional Children, 6635 1st Villanova Place, Denver, Colorado 80222
- Gifted Child Quarterly, 8180 Spring Valley Drive, Cincinnati, Ohio 45236
- Harvard Educational Review, 25 South Main Street, Uxbridge, Massachusetts 01528
- Hearing, 105 Gower Street, London W1H 6AA, England
- Hearing & Speech Action, 814 Thayer Avenue, Silver Spring, Maryland 20910
- Hearing Rehabilitation Quarterly, New York League for the Hard of Hearing, 73 W 23rd Street, New York, New York 10010
- Human Behavior, PO Box 2810, Boulder, Colorado 80302
- Humanist, 923 Kensington Ave., Buffalo, New York 14215
- Illinois Schools Journal, 6800 South Stewart Avenue, Chicago, Illinois 60621
- Indiana Speech & Hearing Journal, Ball State University, Muncie, Indiana 47306
- Instrucr, PO Box 6099, Duluth, Minnesota 55801
- Inter-Clinic Information Bulletin, 317 East 34th Street, New York, New York 10016
- International Child Welfare Review, 1 Rue De Varembe, 1211 Geneva 20, Switzerland
- International Journal of Child Psychiatry, Verlag 10, Basel 13, Switzerland
- International Rehabilitation Review, 279 West 44th Street, New York, New York 10018
- Involvement, PO Box 460, Oak Ridges, Ontario, Canada

* denotes journals monitored for CIJE.
** denotes copyrighted journals for which ECEA has been granted permission to use author abstracts.
Journal of Special Education of the Mentally Retarded, 174, Center Conway, New Hampshire 03813

• Journal of Abnormal Child Psychology
• Plenum Publishing Corp., 267 W. 17th Street, New York, New York 10011

• Journal of Abnormal Psychology, 1200 17th Street NW, Washington DC 20036

• Journal of Applied Behavior Analysis, University of Kansas, Lawrence, Kansas 66044

• Journal of Applied Rehabilitation Counseling, 1522 K Street NW, Washington DC 20005

• Journal of Association for Study of Perception, PO Box 744, DeKalb, Illinois 60115

• Journal of Autism & Childhood Schizophrenia

• Plenum Publishing Corp., 227 W. 17th Street, New York, New York 10011

• Journal of Child Psychology & Psychiatry, Pergermon Press, Elmsford, New York 10523

• Journal of Clinical Child Psychology, 111 South Meramec Avenue, No. 208, St. Louis, Missouri 63105

• Journal of Communication Disorders, American Speech-Language-Hearing Association, 1522 K Street NW, Washington DC 20036

• Journal of Community Health, Human Sciences Press, 72 Fifth Avenue, New York, New York 10014

• Journal of Consulting & Clinical Psychology, 1200 17th Street NW, Washington DC 20036

• Journal of Creative Behavior, 1300 Elmwood Avenue, Buffalo, New York 14222

• Journal of Developmental Disabilities, PO Box 8470, Gentilly Station, New Orleans, Louisiana 70182

• Journal of Education, Department of Education, Halifax, Nova Scotia

• Journal of Educational Psychology, 1200 17th Street NW, Washington DC 20036

• Journal of Educational Research, Box 160S, Journal of Educational Psychology, 1200 17th Street NW, Washington DC 20036

• Journal of Educational Psychology, 51 Riverside Avenue, Westport, Connecticut 06880

• Journal of Exceptional Children, 111 Fifth Avenue, New York, New York 10014

• Journal of Speech & Hearing Disorders, 9303 Old Georgetown Road, Washington DC 20014

• Journal of Speech & Hearing Research, 9303 Old Georgetown Road, Washington DC 20014

• Journal of Teacher Education, One Dupont Circle, Washington DC 20036

• Language Speech & Hearing Services, 4 Conant Square, Boston, Massachusetts 02115

• Mathematics Teacher, 1906 Association Drive, Reston, Virginia 22091

• Mental Retardation, 5201 Connecticut Avenue NW, Washington DC 20015

• Merrill Palmer Quarterly, 71 1st Floor, Avenue, Detroit, Michigan 48202

• Momentum, 350, One Dupont Circle, Washington DC 20036

• Music Educators Journal, 1906 Association Drive, Reston, Virginia 22091

• NASSP Bulletin, 1906 Association Drive, Reston, Virginia 22091

• National Elementary Principal, 1801 North Street NW, Washington, DC 20036

• National Geographic, 1522 K Street NW, Washington DC 20036

• New Outlook for the Blind, 15 West 16th Street, New York, New York 10011

• Notre Dame Journal of Education, PO Box 686, Notre Dame, Indiana 46556

• Nursing Outlook, 10 Columbus Circle, New York, New York 10019

• Optometric Weekly, 9 North Wabash Avenue, Chicago, Illinois 60602


• Peabody Journal of Education, George Peabody College for Teachers, Nashville, Tennessee 37203

• Pediatrics, PO Box 1034 Evanston, Illinois

• Personnel & Guidance Journal, 1607 New Hamp; Avenue NW, Washington DC 20009

• Phi Delta Kappan, 8th & Union Streets, Bloomington, Indiana 47401

• Physical Therapy, 1156 15th Street NW, Washington DC 22005

• Pointer, PO Box 131, University Station, Syracuse, New York 13210

• Psychology in the Schools, 4 Conant Square, Brandon, Vermont 05733

• Psychology Today, PO Box 2990, Boulder, Colorado 80302

• Quarterly Journal of Speech, Communication Association, Statler Hilton Hotel, New York, New York 10001

• Reading Research Quarterly, 6 Ts Avenue, Newark, Delaware 19711

• Reading Teacher, 6 Tyce Avenue, Newark, Delaware 19711

• Rehabilitation Digest, One Yonge Street, Suite 2110, Toronto Ontario MSE 1E8, Canada

• Rehabilitation Gazette, 5502 Maryland Avenue, St. Louis, Missouri 63108

• Rehabilitation Literature, 2023 West Ogden Avenue, Chicago, Illinois 60612

• Rehabilitation Teacher, 88 St. Stephen Street, Boston, Massachusetts 02115

• Remedial Education, 5 Netherlee Street, Glasgow, Scotland, G31 4AT, Scotland

• Review of Educational Research, 1126 16th Street NW, Washington, DC 20036

• Scandinavian Journal of Rehabilitation Medicine, Gamil Brogton 26, Box 62, S-101 21 Stockholm, Sweden

• Schizophrenia Bulletin, 5600 Fishers Lane, Rockville, Maryland 20852

• School Media Quarterly, 1201-1205 Bluff Street, Fulton, Missouri 65251

• Sight Saving Review, 79 Madison Avenue, New York, New York 10016

• Sign Language Studies, Linstock Press, 9306 Mintwood St., Silver Spring, Maryland 20901

• Slow Learning Child, St. Lucia, Brisbane, 4067, Australia

• Social Work, 49 Sheridan Avenue, Albany, New York 12210

• Southern Journal of Educational Research, 107, Southern Station, Hattiesburg, MS 39401

• Special Children, American Association of Special Educators, 107-20 125th Street, New York, New York 11419

• Special Education Forward Trends, National Council for Special Education, 12 Hollycroft Avenue, London NW3 7QL, England

• Special Education in Canada, Parkway V S, 1 Danforth Avenue, Toronto, Ontario, Canada

• Speech Monographs, Speech Communication Association, Statler Hilton Hotel, New York, New York 10001

• Teacher, 22 West Putnam Avenue, Greenwich, Connecticut 06830

• Teacher of the Blind, Royal School for the Blind, Church Road North, Wavertree, Liverpool L15 6TQ, England

• Teacher of the Deaf, 50 Topsham Road Exeter EX2 4NF, England

• Teachers College Record, 525 West 120th Street, New York, New York 10027

• TEACHING Exceptional Children, 1920 Association Drive, Reston, Virginia 22091

• Volta Review, 3417 Volta Place NW, Washington, DC 20007

• Young Children, 1384 Connecticut Avenue NW, Washington, DC 20009
ABSTRACT 189  
EC 03 0189  ED N.A.  
Publ. Date (70)  1p.  
Oettinger, Leon, Jr.  
Amphetamines, Hyperkinesis and Learning  
EDRS not available  
CANHC Literature Distribution, P. O. Box 790, Lomita, Calif. 90717.  
Descriptors: exceptional child services; learning disabilities; medical treatment; drug therapy; hyperactivity; drug addiction; drug abuse; Ritalin; amphetamines  
The medical use of amphetamines to control hyperactivity and improve learning is considered historically and currently. Studies on the effects of Ritalin and of amphetamines are noted. Several side effects are noted along with an absence of habituation, addiction, or abuse. Use of amphetamines and similar drugs for general underlying problems, thus preventing later drug abuse is mentioned. (MS)  

ABSTRACT 1042  
EC 03 1042  ED N.A.  
Publ. Date Dec 68  1p.  
Epstein, Estelle, P. And Others  
Chemotherapy and the Hyperkinetic Child  
EDRS not available  
Descriptors: exceptional child research; emotionally disturbed; hyperactivity; drug therapy; teacher role  
To gather information concerning the utilization of drugs specifically with hyperkinetic children, an investigation was made of the current practices utilizing the various amphetamines, the most common drugs used, and persons dealing directly with such children. The concern of the investigator was the problem facing a classroom teacher when confronted with a hyperkinetic child, and ways in which to promote better understanding of the situation. From the information received, assumptions were drawn and recommendations for teachers were made. (CD)  

ABSTRACT 1492  
EC 03 1492  ED N.A.  
Publ. Date Jan 71  8p.  
Barcai, Avner  
Predicting the Response of Children with Learning Disabilities and Behavior Problems to Dextroamphetamine Sulfate  
EDRS not available  
Pediatries, v47 n1 p73-80 Jan 1971.  
Descriptors: exceptional child research; learning disabilities; hyperactivity; behavior problems; drug therapy; medical research; behavior change; medical treatment; predictive validity; amphetamines; dextroamphetamine sulfate  
The clinical study used a phenomenological, office practice approach to diagnose the hyperkinetic child who responds with improved concentration and organization of his mental facilities to the amphetamines. The combination of anamnestic items, information from the teacher, and the clinical interviews were found to be effective in correctly predicting approximately 85% of behaviorally disturbed children who would respond favorably to stimulating drugs. The finger twitch test and a list of selected questions, which could be used by the pediatrician in his office, were found to lead to a weighted, non-inferential assessment of the child's mental status, as a help in determining the advisability of prescribing the stimulant for some behaviorally disturbed children. (Author)  

ABSTRACT 2408  
EC 03 2408  ED N.A.  
Publ. Date Jun 71  1p.  
Oettinger, Leon, Jr.  
Learning Disorders, Hyperkinesis and the Use of Drugs in Children  
EDRS not available  
Rehabilitation Literature; v32 n6 p162-165 Jun 1971.  
Descriptors: exceptional child education; hyperactivity; drug therapy; learning disabilities; sedatives; diagnostic tests  
The use of drugs to treat hyperactivity and learning disorders in children is discussed. The questions of misuse and abuse of stimulant drugs are scrutinized, and a defense of drug treatment as a normalizing agent for hyperactivity is given. Diagnostic evaluation of the patient before prescribed drug treatment, from physical check through psychological, intelligence, tactile perception, and dominance testing, is covered. The stress throughout the article is that drug treatment be thought of as preparation in which the functioning of the mind as a unit is improved so that it can then respond in a more nearly normal pattern. (CD)  

ABSTRACT 2612  
EC 03 2612  ED 051 612  
Publ. Date 71  8p.  
Department of Health, Education and Welfare, Washington, D.C.  
EDRS mi.709  
Descriptors: exceptional child education; hyperactivity; behavior problems; drug therapy; legal problems; court cases  
Factors are explored which must be considered when challenging the use of drugs for hyperactive school children by law suits. Medical evidence concerning behavior problems is considered as are the following three constitutional problems which arise: procedural due process, family power and personal autonomy, and equal protection. Each issue is discussed and illustrated by court cases. The assumption of the article is that the only issue facing a lawyer is a controversy, a client who refuses (or is contemplating refusing) to take drugs, and a school system which denies him admission unless he does so. The conclusion reached is that the courts, doctors, and school personnel must proceed cautiously and conservatively in this area. (RJ)  

ABSTRACT 2802  
EC 03 2802  ED N.A.  
Publ. Date Jun 71  8p.  
Ireland, Roderick L.; Dimond, Paul R.  
Drugs and Hyperactivity: Process Is Due  
EDRS not available  
Inequality in Education; v8 p19-24 Jun 1971.  
Descriptors: exceptional child education; hyperactivity; behavior problems; drug therapy; legal problems; court cases  
Factors are explored which must be considered when challenging the use of drugs for hyperactive school children by law suits. Medical evidence concerning behavior problems is considered as are the following three constitutional problems which arise: procedural due process, family power and personal autonomy, and equal protection. Each issue is discussed and illustrated by court cases. The assumption of the article is that the only issue facing a lawyer is a controversy, a client who refuses (or is contemplating refusing) to take drugs, and a school system which denies him admission unless he does so. The conclusion reached is that the courts, doctors, and school personnel must proceed cautiously and conservatively in this area. (RJ)  

ABSTRACT 2951  
EC 03 2951  ED N.A.  
Publ. Date Aug 71  8p.  
Claghetn, J. and Others  

DRUG THERAPY
The Effect of Drugs on Hyperactivity in Children with Some Observations of Changes in Mineral Metabolism.

EDRS not available
Journal of Nervous and Mental Disease: V153 N2 P118-25 Aug 1971

Descriptors: exceptional child research; drug therapy; hyperactivity; metabolism; learning disabilities; biochemistry.

Twenty-three hyperactive children in a state school for the mentally handicapped were used as subjects to test out the hypothesis that acetazolamide would reduce hyperactivity. For comparison, amphetamine, a commonly used drug in this indication, placebo, and no treatment were used. Activity was measured using a room equipped with monitored bust and sonic sensors as well as global and ward behavior rating scales. Measures of serum and red cell electrolytes were performed. Acetazolamide was found to reduce serum and red cell potassium. No other electrolyte effects were found with any drug. Of the four treatment conditions, acetazolamide and placebo were felt to improve hyperactivity; acetazolamide was statistically superior. The theoretical significance of this finding is not clear. The drug is known to have many pharmacological actions. Large amounts of the drug enter the cerebral spinal fluid (CSF) and may directly affect neurons. CSF production is reduced and sodium levels are altered. Serum potassium levels also affected. Anticipated inhibition occurs. In one of these actions might be relevant or for that matter, combinations of these actions may be felt. For the undesirable reduction in hyperactive it is felt afoin for the undesirable reduction in hyperactivity noted in this short trial. (Author)

ABSTRACT 2983
EC 03 2983 ED N.A.
Publ. Date Jun 71
1p
Campbell, Susan B. and Others
Cognitive Styles in Hyperactive Children and the Effect of Methylphenidate.
EDRS not available

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

Cognitive problems of hyperactive children and effects of energizing drugs on their cognitive performance were studied. Data suggested that 16 hyperactive children usually employed less efficient problem solving strategies than normal children, which may have explained their poor academic achievement. Hyperactive children whose behavior was modified by methylphenidate seemed to solve problems more efficiently and carefully; academic achievement; and classroom behavior, and cognitive abilities may have improved due to increased attention, response organization, and impulse control. (CB)

ABSTRACT 2984
EC 03 2984 ED N.A.
Publ. Date ’71
1p
Cott, Allan
Orthomolecular Approach to the Treatment of Learning Disabilities. Eds not available
Schizophrenia: V3 N2 P105-105 Second Quarter 1971

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

Orthomolecular therapy for learning disabled children is discussed. On the hypothesis that the hyperactive, learning disabled child may actually have a biochemical of neurological disorders, this author has treated 500 emotionally disturbed and learning disabled children from 1966 to 1971. His successful treatment of using megavitamin therapy to provide optimum molecular brain composition, especially optimum concentration of substances normally present in the human body, is briefly discussed. Megavitamins successfully used to control hyperactivity, ritualism, and seizures are niacin or niacinamide, ascorbic acid, pyridoxine, pantothenate. Advocating more studies relating advances in nutritional sciences to medicine, the author suggests that hyperactivity in the genetically predisposed child may be an early symptom of schizophrenia and therefore may be manifest by ingestion of cereal grains and their products. (Author)

ABSTRACT 3135
EC 03 3135 ED N.A.
Publ. Date Aug ’71
1p
Sykes, Donald H. and Others
Attention in Hyperactive Children and the Effect of Methylphenidate (Ritalin).
EDRS not available

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

The study examined the performance of 40 hyperactive children relative to that of 19 controls (matched for age, sex, and IQ) on a task susceptible to momentary lapses of attention: examined the motor restlessness of both groups while seated during the attention task, using a stadiometric cushion, after the design of Sprague and Toppe (1966); and investigated the effect of methylphenidate (Ritalin): a central nervous system stimulant, on attention in the hyperactive children. It was found that the maintenance of attention to an experiment-paced task requiring the detection of significant stimuli was impaired in the hyperactive subjects; they detected fewer of the significant stimuli and made more incorrect responses to non-significant stimuli. Presence or absence of an auditory distractor had no effect on either group. Motor restlessness of the hyperactive children was significantly greater, and while restlessness increased during the second session for both groups, it increased at a faster rate for the hyperactive group. Hyperactive children treated with methylphenidate (Ritalin) improved significantly in all areas of performance as compared to hyperactive children given a placebo. (KW)

ABSTRACT 240
EC 04 0240 ED N.A.
Publ. Date Nov 71
1p
Greenwald, Warren R.; Jones, Philip R.
Clearinghouse: The Effect of Methylphenidate on Behavior of Three School Children: A Pilot Investigation.
EDRS not available
Exceptional Children: V38 N3 P261-3 Nov 1971

Descriptors: exceptional child research; hyperactivity; behavior problems; drug therapy; emotionally disturbed; behavior change; student behavior; medical treatment; methylphenidate.

The study examined the effects of methylphenidate (Ritalin) on three male students, ages 8-12, through double blind techniques, comparing teacher observations with those of a trained disinterested observer. Subjects were three hyperactive students, who had been on medication for 1 year or less. Under the double blind technique, students received methylphenidate for 1 week and placebo for 1 week. Each week teachers assigned an average rating to each of 87 items on a Behavior Problem Checklist, which covered four areas: conduct problem, personal problem, inadequacy and immaturity, and social delinquency. The classroom observer used an instrument with three categories of behaviors: deviant behaviors, attending or working oriented behaviors, and teacher-pupil interactions. Teachers noted a decrease in conduct problems and personality problems while students were receiving methylphenidate, and the observer noted decrease in deviant behaviors and teacher-pupil interactions and a slight improvement in attending under the same condition. (KW)
reviewed. The decision to initiate drug therapy for children with minimal cerebral dysfunction is now complicated by the climate of the times—the social revolution, particularly among the young, and above all, the prevalent drug culture. A discussion of the therapeutic regimen is included. (Author)

**ABSTRACT 324**
EC 04 0324  ED N.A.  
Publ. Date Nov 71  8p.  
Conners, C. Keith  
Recent Drug Studies with Hyperkinetic Children.  
EDRS not available  
Descriptors: exceptional child education, learning disabilities: hyperactivity: drug therapy: behavior patterns: cognitive development  
A brief overview is given of recent controlled studies of effects of stimulant drugs on general behavior, motor behavior, cognition and learning, physiological responsiveness, and attention in hyperkinetic children. Emphasis is placed on objective methods of assessment of drug effects as indicated by patterns of behavior and cognitive development. (Author CH)

**ABSTRACT 326**
EC 04 0326  ED N.A.  
Publ. Date Nov 71  8p.  
Hensel, F. R. and Others  
Effects of Dextroamphetamine on Hyperkinetic Children: A Controlled  
Double Blind Study.  
EDRS not available  
Utilizing objective behavior scales for rating characteristics in the hyperkinetic syndrome, teachers' ratings revealed favorable effects of dextroamphetamine in 27 of a group of 42 children with hyperkinetic impulse disorder and learning difficulties. Statistical comparisons of ratings received under pretest, placebo, and drug conditions showed significant differences on the scales measuring hyperactivity, short attention span, impulsivity, teacher control, preselect hyperkinetic children who would respond to medication with the questionnaire-rating scale technique. Other objective measures have been discussed which can be incorporated into the evaluative procedure. (Author CH)

**ABSTRACT 329**
EC 04 0329  ED N.A.  
Publ. Date Nov 71  2p.  
Novack, Harry S.  
An Educator's View of Medication and Classroom Behavior.  
EDRS not available  
Descriptors: exceptional child education: learning disabilities: hyperactivity: drug therapy: behavior change: discipline problems  
Classroom teachers have two tasks to perform in assisting proper use of drug therapy on hyperactive children. The first is to supply objective observations on effectiveness of medication in controlling classroom behavior. The second is to involve teaching strategies for children who are unlikely to benefit from medication. Proper teacher training in behavior control techniques will make it possible for many children to learn a minimum of medication to effect behavior change. (Author CH)

**ABSTRACT 330**
EC 04 0330  ED N.A.  
Publ. Date Nov 71  8p.  
Conrad, W. G. and Others  
Effects of Amphetamine Therapy and Preemptive Tutoring on the Behavior and Achievement of Lower Class Hydrokinetic Children.  
EDRS not available  
The present study had two primary objectives: to evaluate the relatively long-term effects of dextroamphetamine on behavior, achievement, and perceptual-cognitive functioning of hyperkinetic children; and to compare effects of dextroamphetamine and preeminent perceptual-cognitive tutoring, using behavior rating scales. Sixty-eight children matched for intelligence and degree of hyperactivity were assigned to the following groups: placebo, no tutoring, placebo tutoring, dextroamphetamine tutoring, and dextroamphetamine tutoring. Doubleblind procedures were used in administration of medication. Results indicated that dextroamphetamine contributed to a reduction of hyperkinetic behavioral symptoms and improved performance on various measures of perceptual motor and cognitive development. Twice-week tutoring for an average of 20 weeks resulted in gains on some Wechsler Intelligence Scale for Children subtests but was clearly not as effective as medication. Neither experimental condition significantly influenced academic achievement assessed by the Wide Range Achievement Test. Implications for the management and instruction of hyperkinetic children were discussed. (Author CH)

**ABSTRACT 331**
EC 04 0331  ED N.A.  
Publ. Date Nov 71  8p.  
Lauffer, Maurice W.  
Long-term Management and Some Follow-up Findings on the Use of Drugs with Minimal Cerebral Synchronies.  
EDRS not available  
Descriptors: exceptional child education: hyperactivity: drug therapy: behavior patterns: follow-up studies  
Discussed is the hyperkinetic impulse disorder and its effect upon learning and behavior in children and adolescents. Clinical experience indicates that there may be a specific, beneficial, controlling effect from use of psychostimulants and cerebral stimulants, all characterized by causing an increase in available norepinephrine at cell surfaces in the central nervous system. Also covered are: effects of reducing quantity of norepinephrine at cell surfaces, medication administration, possible side effects and long-term outcomes of medications, recognition of growth of hyperkinetic impulse disorder, and results of follow-up studies showing current levels of functioning and presence of absence of persistent toxic effects from long-term use of the medications. (Author CH)

**ABSTRACT 332**
EC 04 0332  ED N.A.  
Publ. Date Nov 71  8p.  
Report of the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children.  
EDRS not available  
The advisory report to professionals and public briefly discusses aspects of stimulant medication use in treating hyperkinetic behavioral disorders in elementary school students. The general nature of behavior disorders in children is outlined with emphasis on hyperkinetic disorders. Incidence, etiology, course, and diagnosis of hyperkinetic disorders are mentioned briefly. Various treatment programs for hyperactivity are noted, such as behavior modification, elimination of disturbing influences in classroom and home, and stimulant medications. Concerns voiced by the public and media on stimulant medication use include medication toxicity, drug dependency, safeguards against misuse, stimulant medication as a risk for others, emotional handicaps caused by medication, and parental rights. Examined finally are roles of pharmacological industry, professionals, and news media in publicizing stimulant drugs for children. (Author CH)

**ABSTRACT 1299**
EC 04 1299  ED N.A.  
Publ. Date Feb 72  4p.  
Delong, Arthur R.  
What Have We Learned From Psychoactive Drug Research on Hyperactives?  
EDRS not available  
American Journal of Diseases of Children; V123 N2 P157-80 Feb 1972  
Descriptors: exceptional child education: hyperactivity: drug therapy: research
methodology, research design, research needs

The discussion of research dealing with the use of psychostimulant drugs to modify hyperactive behavior first delineates seven variables or characteristics considered to be minimal in a study determining effects of such drugs. Therapy and designed to meet the criteria of both research methods and diagnostic subgroups. These character-
istics are placebo control, blind procedures, random assignment of patients to placebo and active drug, a uniform group of patients of sufficient size to permit statistical analysis, detailed description and measurement of subjects, precise description of measurements and criteria by which subjects will be evaluated, and detailed description of the study's social setting. Also discussed are five major questions raised by psychoactive drug studies. Questions concern name for the disorder, etiology, specific behaviors identified by hyperactivity, measurement of specific behaviors, and the drug and dosage to be used. (KW)

ABSTRACT 1224
EC 04 1324
Pub. Date 71
G. C. Keith

Comparative Effects of Stimulant Drugs in Hyperkinetic Children. Massachusetts General Hospital, Boston, Child Development Laboratories, Harvard University, Cambridge, Medical School
EDRS mf hc

Descriptors: exceptional child research; hyperactivity, minimal brain dysfunction, drug therapy, medical treatment; medical research, behavior change; learning disabilities

The study compared the efficacy, side effects, and safety of methylphenidate and dextroamphetamine (Dexedrine) as compared with placebo. Subjects were 81 children, ages 6-12 years, who evidenced one or more signs of minimal brain dysfunction, and were referred with major complaints of hyperactivity, such as attention span, distractibility, short frustration tolerance, disruptive behavior, and academic problems. Subjects were randomly assigned to three treatment conditions. During the 8-week, medical evaluation occurred four times, psychological testing twice, and parent and teacher ratings weekly. It was found that both drugs significantly reduced symptoms observed by placebo controls. Dexedrine produced a more immediate and dramatic effect, with more patients being much improved. Cynder, however, did benefit a substantial number of patients, with fewer anorexic side effects. Neither drug produced hematologic, liver, kidney, or cardiovascular effects of consequence. (KW)

ABSTRACT 1652
EC 04 1652
Pub. Date 72
Satterfield, James H. and Others

Physiological Studies of the Hyperkinetic Child, Gateway Hospital, Los Angeles, California National Institute of Mental Health (HHEW), Bethesda, Maryland
EDRS mf hc

Descriptors: exceptional child research; hyperactivity, drug therapy, physiology, electroencephalography, emotionally disturbed; primates; grades

Reported were results of the first year of a 3-year physiological study of the hyperkinetic child. The male subjects were 6 to 9 years of age, attending school without sensory defects, 80 or above in Wechsler Intelligence Scale for Children Full Scale, off medication for 3 months prior to testing, and diagnosed as hyperkinetic. Electroencephalograph and evoked cortical measures were made for 31 hyperkinetic children and 21 normal controls in order to predict clinical response to stimulant medication. Experimental design included a structured interview, teacher and parent rating scales, medical evaluation and psychological testing, watching a video-taped cartoon while taking cortical measures at beginning and end of 1-week period, and Rituxin and placebo treatments. Overall results indicated existence of a fundamental physiological difference between children responding well and poorly to stimulant medication. Low central nervous system arousal and good clinical response to stimulant treatment were found to characterize one group, while high central nervous system arousal and poor response to stimulant treatment were found to typify the other group. (CB)

ABSTRACT 1758
EC 04 1758
Pub. Date May 72
Eisenberg, Leon

The Clinical Use of Stimulant Drugs in Children. EDRS not available
Pediactrics. V43 N5 P279-P35 15 May 1972

Descriptors: exceptional child education; minimal brain injury; hyperactivity; drug therapy

The general discussion of the clinical use of stimulant drugs in children often diagnosed as minimally brain injured considers a definition of hyperactivity, incidence of hyperactivity, nature and etiology of hyperactivity, pathophysiology of hyperactivity, use of the stimulant drugs dextroamphetamine and methylphenidate and their common side effects of insomia and anorexia, efficacy of the drugs, and relationship of childhood use of stimulant drugs to potential adolescent drug abuse. (CB)

ABSTRACT 1802
EC 04 1802
Pub. Date 72
Spring, Carl

Drug Therapy for Hyperactivity - Do the Benefits Outweigh the Hazards? Washington, D.C. EDRS mf hc

Descriptors: exceptional child education; learning disabilities; minimally brain injured, neurologically handicapped; hyperactivity; drug therapy

Briefly discussed in the bulletin are advantages and disadvantages of drug therapy for minimally brain injured or neurologically handicapped children who are hyperactive. It is not clear that controlled studies on the use of drugs to treat hyperactive children have been conducted and that a precise diagnosis of hyperactivity is difficult. Selected possible disadvantages are effects from use of drugs are said to be elevation of heart pressure, depression, appetite, nausea, insomnia, and dependence on drugs. Many parents are reported to resort to drug therapy when it seems to help solve the child's behavior problems; however, it is noted that part of the mental health industry is devoted to pushing amphetamines. Proper administration of the drugs is said to be the key to successful drug therapy, while use of successful alternative treatments may also be considered. (CB)

ABSTRACT 2055
EC 04 2055
Pub. Date Jul 72
Edelman, Robert B.

The Drug Treatment of Learning Disorders: Continuing Controversy. EDRS not available
Journal of Pediatrics, V81 N1 P148-8 Jul 1972

Descriptors: exceptional child education; learning disabilities; hyperactivity;drug therapy

Conclusions of a panel report by the Department of Health, Education, and Welfare are summarized. Followed by brief criticism. The panel report concerned use of drug therapy in cases of hyperactivity. Selected results state that toxics of stimulant drugs is not a major problem, that there is no significant established risk of later drug dependency, and that the school's role is to inform parents of the child's behavior, not to specify a method of medical management. Brief critique of the report notes that neither minimal brain dysfunction nor hyperkinetic disorder is a satisfactory diagnostic term, that the attribution of normal or superior intelligence level to hyperkinetic children makes no sense, that favorable response to drugs does not account for variables, and that the degree of drug therapy effectiveness is not really known. (CB)

ABSTRACT 2968
EC 04 2968
Pub. Date Aug 72
Spring, Carl

Perceptual-Speed Deficit in Reading-Disability Children. California University. Davis
National Center for Educational Research and Development (DHEW/JOE), Washington, D. C. EDRS mf hc

Descriptors: exceptional child research; reading difficulty; hyperactivity; perception
A study of neurological examinations, electroencephalographic (EEG) findings, and behavioral responses to methylphenidate treatment in 37 hyperactive boys, 5 to 10 years of age, is reported and discussed. The results are said to have indicated that SS with minor neurological abnormalities in four or more categories responded with significantly more improvement to methylphenidate treatment than SS without abnormalities; SS with abnormal EEGs had significantly more improvement than SSs with normal EEGs; and that a significant correlation was found between the degree of evidence of brain dysfunction (obtained from EEG and neurological examinations) and the probability of response to methylphenidate treatment. It is suggested that both the neurological and the EEG examinations play a significant role in the assessment of hyperactive children. (Author/HC)

ABSTRACT 421
EC 06 0241  ED N.A.  Publ. Date Oct 73  5p.
Murray, Joseph N.
Drugs to Control Classroom Behavior? EDNS not available
Educational Leadership; V51 N1 P21-5 Oct 1973

Descriptors: exceptional child education; emotionally disturbed; hyperactivity; childhood; drug therapy; physicians; medical treatment

Focused upon in the article are issues related to drug therapy for modification of overactive behavior in children. The following questions of educators and professionals on use of medication are discussed: why are some young children medicated while others are not; who should receive medication; what are some possible causes of hyperkinesias; what drugs are used most frequently to control hyperkinesias; and what side effects are evident. Of findings reported from a study, some show that both parents and teachers reported from a study, some show that both parents and teachers expect medication to be a cureall for the child's overactivity and that the administration of a school affects the number of children medicated. Recommended is assessment of the child's behavior in every setting with subsequent review by the family physician before parents consent to medication; also suggested is implementation of alternatives to medication whenever possible. (MC)

ABSTRACT 428
EC 06 0328  ED N.A.  Publ. Date Jun 73  4p.
Fowlie, Barbara

Descriptors: exceptional child education; learning disabilities: hyperactivity; drug therapy; parent role; observation

Suggested by a parent are ways that parents of a hyperactive child requiring treatment with stimulants can observe their child for the most effective administration of medication. Stressed is the importance of frequent communication with the child's teacher and doctor to determine proper dosage levels. The improvement of self esteem and normal maturation are seen to lead to a gradual reduction in the need for medication. (DB)

ABSTRACT 424
EC 05 2447  ED N.A.  Publ. Date Jan-Mar 13p.
Satterfield, James H. and Others
Response to Stimulant Drug Treatment in Hyperactive Children: Prediction from EEG and Neurological Findings.
Journal of Autism and Childhood Schizophrenia; V3 N1 P36-48 Jan-Mar 1973

Descriptors: exceptional child research; emotionally disturbed: hyperactivity; early childhood; childhood; medical research; medical treatment; neurology; electroencephalography; drug therapy

A study of neurological examinations, electroencephalographic (EEG) findings, and behavioral responses to methylphenidate treatment in 37 hyperactive boys, 5 to 10 years of age, is reported and discussed. The results are said to have indicated that SS with minor neurological abnormalities in four or more categories responded with significantly more improvement to methylphenidate treatment than SSs without abnormalities; SSs with abnormal EEGs had significantly more improvement than SSs with normal EEGs; and that a significant correlation was found between the degree of evidence of brain dysfunction (obtained from EEG and neurological examinations) and the probability of response to methylphenidate treatment. It is suggested that both the neurological and the EEG examinations play a significant role in the assessment of hyperactive children. (Author/HC)

ABSTRACT 241
EC 06 0241  ED N.A.  Publ. Date Oct 73  5p.
Murray, Joseph N.
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Descriptors: exceptional child education; emotionally disturbed; hyperactivity; childhood; drug therapy; physicians; medical treatment

Focused upon in the article are issues related to drug therapy for modification of overactive behavior in children. The following questions of educators and professionals on use of medication are discussed: why are some young children medicated while others are not; who should receive medication; what are some possible causes of hyperkinesias; what drugs are used most frequently to control hyperkinesias; and what side effects are evident. Of findings reported from a study, some show that both parents and teachers reported from a study, some show that both parents and teachers expect medication to be a cureall for the child's overactivity and that the administration of a school affects the number of children medicated. Recommended is assessment of the child's behavior in every setting with subsequent review by the family physician before parents consent to medication; also suggested is implementation of alternatives to medication whenever possible. (MC)
Reviewed is research on the effects of amphetamines on hyperactive children. It is suggested that amphetamines are prescribed more often than is necessary. Pointed out is the lack of understanding about the diagnosis and etiology of hyperactivity as well as the mechanism of amphetamine action in children. The observation that amphetamines have a paradoxical calming effect on hyperactive children unlike the stimulating effect they exert on adults is said to fail to justify the assumption that amphetamines do not have the same potential for harm in children as in adults. It is concluded that the possible adverse effects of the drugs and the unknown long-term risks involved necessitate a reconsideration of the present policy of amphetamine administration in the schools. Suggested as an alternative to drug therapy is the use of behavior modification techniques.

**ABSTRACT 1546**

EC 06 1546  ED N.A.
Publ. Date Mar 74  4p.
Ellis, M. J. and Others
Methylphenidate and the Activity of Hyperactives in the Informal Setting.
Child Development; V45 N1 P217-20 Mar 1974

Descriptors: exceptional child research; learning disabilities; hyperactivity; childhood; drug therapy

From a photographic record of nine hyperactive children, 8 to 10 years of age, playing in an informal setting, multiple measures related to activity and distractibility were derived and used to test (the same children) for the effects of 0.10, 0.30, and 1.00 mg/kg of methylphenidate relative to that of a placebo. The finding that no discernible effects of the medication on the children's behavior implied that methylphenidate's action does not influence energy expenditure patterns but that its mode of action involves attentional mechanisms, and that the drug seems to improve tractability and learning in situations involving clear-cut demands and high compliance; yet leaves informal behavior undisturbed. (Author/MC)

**ABSTRACT 2101**

EC 06 2101  ED N.A.
Publ. Date Jun 74  8p.
Max, Deborah
Amphetamine Therapy With Hyperactive Children.
AVISO; P9-13 Jun 1974

Descriptors: exceptional child research; hyperactivity; drug therapy; literature reviews; research reviews (publications); behavior change; identification; research needs

Literature on amphetamine therapy with hyperactive children is reviewed. Amphetamines are explained to have a calming effect thought to be due to their effect in increasing the amount of norepinephrine liberated in the brain's reticular formation. Potential intervening variables which the author believes to have been neglected in research to date include parental attitudes, inconsistent administration of the drug, seasonal variations in behavior, and teacher, parent and therapist expectations. A literature review of 1100 drug studies is reported as identifying only 210 studies with adequate controls. The same review was found to show that while approximately half of the studies reviewed found significant behavioral effects of drugs on hyperactivity, only about one-third of the studies measured behavior change objectively; and that the preponderance of research indicating significant effects of drugs on hyperactivity was based on subjective evidence, while a majority of the studies finding no significance was based on objective criteria. Given the alleged increasing acceptance of amphetamine therapy, it was recommended that future research clarify methodological questions and provide objective data on drug effects. (GW)

**ABSTRACT 1596**

EC 06 1596  ED N.A.
Publ. Date Sum 73  16p.
Wonderlich, Russ P.
Treatment of the Hyperactive Child: Academic Therapy; V8 N4 P375-90 Sum 1973

Descriptors: exceptional child services; hyperactivity; medical treatment; allergy; etiology; learning disabilities; therapy; drug therapy; behavior change; nutrition

Described individually are the following forms of medical treatment for the hyperactive child: stimulants, tranquilizers, megavitamins, corticosteroids, antihistamines, anticonvulsants, food elimination, air filtration, allergic desensitization, perceptual motor training, and behavioral counseling. The author, a physician, believes that hyperactivity is often a symptom of allergy and that megavitamin, antihistamine, corticosteroid, food elimination, air filtration, and desensitization are often effective because of their anti-inflammatory properties. Perceptual motor training is thought to help the child gain control of his own mind and body, while behavioral counseling can help the child's family cope with the child's behavior. Noted are problems in isolating causative factors and in arranging treatment steps to remedy the problem. (DB)

**ABSTRACT 1598**

EC 06 1598  ED N.A.
Publ. Date May 74  16p.
Glennon, Claire A.; Nason, Doris F.
Managing the Behavior of the Hyperactive Child. Academic Therapy; V8 N4 P375-90 Sum 1973

Descriptors: exceptional child research; hyperactivity; medical treatment; allergy; etiology; learning disabilities; therapy; drug therapy; behavior change; nutrition

Described individually are the following forms of medical treatment for the hyperactive child: stimulants, tranquilizers, megavitamins, corticosteroids, antihistamines, anticonvulsants, food elimination, air filtration, allergic desensitization, perceptual motor training, and behavioral counseling. The author, a physician, believes that hyperactivity is often a symptom of allergy and that megavitamin, antihistamine, corticosteroid, food elimination, air filtration, and desensitization are often effective because of their anti-inflammatory properties. Perceptual motor training is thought to help the child gain control of his own mind and body, while behavioral counseling can help the child's family cope with the child's behavior. Noted are problems in isolating causative factors and in arranging treatment steps to remedy the problem. (DB)

The role of the National Institute of Mental Health (NIMH) and the Psycho-pharmacology Research Branch (PRB) in supporting stimulant drug treatment of hyperactive and minimally brain damaged children is summarized. Current PRB research priorities are presented, and social and political issues raised by drug treatment are explored. Persons who received grants for pharmacotherapy from NIMH and PRB and their proposed research projects are listed. Current priorities are said to include concurrent design studies comparing the relative efficacy of different classes of

ED N.A.
ABSTRACT 231
PUB. DATE Oct '74 • ED N.A • Pages: 6p
Farr, John G., and Others
Perkinelminarion (CSH) in the Treatment of Childhood Hyperkinesis.
Journal of Learning Disabilities, V7 N8 P198-203 Oct '74

ABSTRACT 413
PUB. DATE 74 • ED N.A • Pages: 6p
Huey, H. R., and Others
8-10 Year Follow-Up of 84 Children Treated for Behavioral Disorder in Rural Vermont.

ABSTRACT 455
PUB. DATE 74 • ED N.A • Pages: 206p
Gross, Martin D.; Wilklos, Wilson E.
Minimal Brain Dysfunction.
Hunner/Mazet, Inc., 64 University Place, New York, New York 12001 (M10,95)

ABSTRACT 902
PUB. DATE 72 • ED N.A • Pages: 9p
Fox, Gertrude W.
Literature Search Form Reference Section, Reference Services Division, National Library of Medicine, Bethesda, Maryland 20014.

ABSTRACT 1174
PUB. DATE 74 • ED N.A • Pages: 166p
Weiner, Ken, Ed.
Drugs and the Handicapped Child.

Proceedings From Special Studies Institute, Rochester, New York
EDRS No. he
zation and drug abuse: a human development approach to drug education; counseling services at a community center serving high school drug users; methods and materials used in Rochester (New York) drug education classes; instruction methods and resource materials for drug education; values clarification and drug use; educational techniques in drug abuse education; and the peer group approach to drug education. Given are recommendations for an effective drug education program which stressed a mental health approach, peer interaction, and examination of personal value systems. Also included are a basic bibliography of the effects of effective drug education, composite results of pre- and post-tests by conference participants, and composite evaluation results indicating that most conference participants felt that proceedings were valuable. (LH)

ABSTRACT 1738
EC 07 1738 ED N A. Pub. Date Mar 75 4p Bosco, James
Behavior Modification Drugs and the Schools: The Case of Ritalin.
Phi Delta Kappan V56 N7 P489-92 Apr 75

Descriptors: exceptional child education; learning disabilities; hyperactivity; drug therapy; medical treatment; administrative policy; educational philosophy; educational needs.

The use of Ritalin to modify the behavior of hyperactive children and the educational, social and ethical implications for school system policies and procedures are discussed. Stressed is the need for further research concerning the effects of Ritalin on scholastic variables under differing conditions and on social variables such as administrator and teacher ratings and parental and peer attitudes. Considered are educational implications regarding the controversy over the nature of stimulant drug usage, the role of school personnel in screening and referring hyperkinetic children, teachers' legal and ethical responsibilities for children on a stimulant drug regime, and the investigation of teaching and curricular practices which may contribute to hyperactivity. Recommendations are offered for improving communication and coordination between school system and medical personnel and for evaluating educational programs for children with learning and behavior disorders. (LH)

ABSTRACT 1991
EC 07 991 ED N A. Pub. Date Feb 75 4p Allen, Richard P. and Others
Effects of Psychostimulants on Aggression.
Journal of Nervous and Mental Disease; V160 N2 P138-45 Feb 75

Descriptors: exceptional child research; emotional disturbances; childhood, adolescence, aggression; drug therapy; psychotherapy; stimulant research; (publications); medical research.

A review of the literature on the relation between psychostimulant drugs and aggression leads to the following conclusions: that in laboratories animals, small and moderate acute doses of the major stimulants (e.g., dextroamphetamine) generally either reduce or have no effect on aggression, whereas high doses and chronic moderate to high doses of these drugs increase aggression in most species; that in man, aggression is not produced by the major Federal Drug Administration licensed psychostimulants, except in doses which produce a paranoid psychosis; that children with hyperactivity and aggressive behavior usually respond to individual medication with reduced fighting, delinquency, and impulsiveness, although the effect of the drug on aggression may be separate from its effect on hyperactivity; and that hyperactive aggressive adolescents respond to stimulants with the same benefits as do hyperactive children. The available data on the human response to stimulants suggest a need to better evaluate how drug amphetamine effects on aggression in adolescents and adults. (Author)

ABSTRACT 2711
EC 07 2711 ED N A. Pub. Date Apr 75 4p Bowler, K. Bruce; Meteor, Cecil D
Hyperactivity: Etiology and Intervention Techniques.
Journal of School Health V45 N4 P192-92 Apr 75

Descriptors: exceptional child education; learning disabilities; hyperactivity; drug therapy; attention span; motivation; reinforcement; behavior change; operant conditioning; verbal learning; environmental influences.

Discussed are various theories on the etiology of hyperactivity in children, and described are medical and nonmedical intervention strategies. Briefly reviewed is the historical identification of the hyperactive condition. Considered are etiological theories including pathophysiological theories, attention and motivation theories, and reinforcement theory. The following intervention strategies are examined: reduction of environmental distractions, verbal mediation, administration of stimulants or tranquilizers, behavior modification, and observational learning. It is concluded that hyperactivity is not one but a complex of symptoms, that administration of stimulants may be indicated though tranquilizers are not, and that drug intervention should be considered only when other interventions such as contingency plans, modeling, and verbal mediation have failed. (DB)

ABSTRACT 2294
EC 07 2294 ED N A. Pub. Date Apr 75 4p Medication for Hyperkinetic Children.
Pediatrics; V55 N4 P860-6 Apr 75

Descriptors: hyperactivity; drug therapy; medical treatment; stimulants; drug side effects; learning disabilities; medical evaluation.

Discussed is the need for the physician's careful management of control medication for hyperkinetic children. Proper dosage, adequate trial periods, and appropriate selection of patients are among the factors considered essential in successful drug therapy. (CL)

ABSTRACT 2723
EC 07 2723 ED N A. Pub. Date Apr 75 4p Barker, Philip
Haloperidol. (Annnotation)
Journal of Child Psychology and Psychiatry; V16 N2 P609-72 Apr 75

Descriptors: exceptional child services; exceptional child research; emotionally disturbed; hyperactivity; behavior problems; childhood; medical treatment; drug therapy; Haloperidol.

The use of the drug haloperidol to treat childhood hyperactivity, lies, and stuttering is evaluated; and dosage, side effects and toxic effects are described. It is concluded that haloperidol appears useful in treating behavior disorders, is safe when properly used, and should seldom be the only treatment given. (IH)

ABSTRACT 2748
EC 07 2748 ED N A. Pub. Date May 75 8p Schair, Richard J.; Reynard, Carol L.
Pediatrics; V55 N4 P504-16 May 75

Descriptors: exceptional child research; learning disabilities; hyperactivity; medical treatment; drug therapy.

Ninety-eight hyperactive children, 4 to 12 years old, were treated with methylphenidate or placebo for 4 months under double-blind conditions. Results indicated that only one of the 48 children receiving placebo was judged to be a drug success, whereas 74% receiving methylphenidate were judged to be drug successes: that a wide range of dosages was required for optimum drug effects, that drug failures were due either to withholding, apathetic behavior, or lack of evidence of drug effectiveness, or that overweight children did not respond well to medication. That the most dramatic successes were seen in children characterized as exhibiting hyperactivity in the absence of other evidence of neurological or emotional disturbances. (Author)

ABSTRACT 2916
EC 07 2916 ED N A. Pub. Date May 75 4p Weber, Bruce A.; Salzbaehner, Stephen J.
Use of CNS Stimulant Medication in Averaged Electroencephalographic Audiometry with Children with MBD.
Journal of Learning Disabilities; V8 N5 P300-3

Descriptors: minimally brain injured; auditory tests; drug therapy; exceptional child research; learning disabilities; hyperactivity; childhood.

Averaged electroencephalographic audiometry (AEF) was conducted to evaluate the
hearing of 12 children (mean age 8 years 6 months) diagnosed as having minimal brain dysfunction (MBD). Each child was tested on three separate days to permit a double blind evaluation of responsiveness to no drug, placebo, and central nervous system stimulant drug conditions. In addition, 9 of the 12 children were tested a fourth time to permit an examination of the two dosage levels. Lower thresholds were recorded when children were tested a fourth time to permit conditions. In addition, 9 of the 12 children diagnosed as having minimal brain dysfunction (MBD). Each child 6 months) diagnosed as having minimal education: drug therapy, exceptional child services.

Physicians have been treating hyperactivity in children with drugs as if it were a disease instead of a collection of symptoms which require exhaustive diagnostic tests to determine the underlying problem. Physiological causes of hyperactivities include poor oxygenation due to a heart problem, low blood sugar, malnutrition, lead poisoning, glaucoma problems, brain damage due to encephalitis birth, mixed dominance, mild seizures, food additives, tight underwear, or sleeplessness. Ritalin, the most commonly prescribed medication for hyperactivity, appears to have side effects such as the suppression of growth (DH).

ABSTRACT 3504

Descriptors: exceptional child research; hyperactivity; childhood; drug therapy; attention span; physiology; reactive behavior; Methylphenidate.

A study of 16 hyperactive children (6.5-12 years) was conducted to assess attentional deficits and response to methylphenidate, a stimulant drug. During trials with a race track apparatus, SS were monitored under placebo and methylphenidate conditions for components (heart rate and reaction-time performance) associated with attention. Attentional deficits shown by long response latencies were reflected in heart rate responses which were not statistically inconsistent with sustained attention. SS exhibiting the greatest attentional deficit displayed the most favorable response to methylphenidate in both reaction-time performance and heart rate measures. (Author/SB)

ABSTRACT 3702

Descriptions: hyperactivity; behavior pattern; drug therapy; psychology; medical evaluation; exceptional child education; childhood; early childhood; literature reviews.

Presented is a paper on hyperkinetic children which reviews behavioral characteristics and the use and effect of stimulant drugs in treatment. It is reported that hyperactivity is mainly a problem of young children since all but the most severe cases seem to outgrow the behavior in adolescence. Although evidence is seen to support the normalizing effects of stimulant drugs, it is explained that too little attention has been paid to potential side effects. It is concluded that there is need for a broader program of clinical evaluation which assesses drug effects not only on behavior, but also appetite, the cardiovascular system, as well as the sociological impact. (Author/SB)

ABSTRACT 3703

Descriptors: hyperactivity, preschool education; drug therapy; behavior pattern; cognitive processes; exceptional child research; family problems; psychomotor skills; aggression; Ritalin.

Twenty-eight hyperactive preschoolers were observed and tested to determine behavioral and cognitive patterns and to examine the effect of methylphenidate (Ritalin) treatment. Data were obtained from nursery school observations, psychological tests, and psychiatric interviews with mothers. Among results were that SS were more aggressive than controls, that SS did not differ significantly from controls in motor impulsivity, and that there were no significant differences in family pathology between true (extremely hyperactive) and situational (not pathologically active in nursery school) hyperactives. In addition, 26 of the SS were observed for 3 weeks, rated on the Hyperactivity Rating Scale, and given individual psychological tests under two conditions: Ritalin and placebo. Ritalin was found to reduce hyperactivity at home, but it did not improve nursery behavior or psychological functioning. Evidence is presented that preschool hyperactivity varies in its manifestations and pervasiveness from one situation to another, and that unwanted side effects make Ritalin less useful for preschoolers than for older hyperactive children. (Author/SB)

ABSTRACT 3717
EC 07 3717 ED N. A. Pub. Date Jul 75 9p Lones, Jon; Ordone, Trace T. Using Cerebral Stimulants to Treat Minimal Brain Dysfunction. American Journal of Orthopsychiatry: V45 N4 P564-572

Descriptors: hyperactivity; minimally brain injured; childhood; drug therapy, research reviews; publications; exceptional child research; medical case histories; physicians; behavior change; medical evaluation.

Considered are questions raised during a study of the medical records of 135 minimally brain-dysfunctioned boys (6-12 years) treated for hyperactivity with cerebral stimulants. The questions discussed (with sample findings in parentheses) are: Do physician factors contribute to child diagnosis, treatment choice, and clinical improvement? During initial treatment period, the child's diagnosis and form of treatment but not his outcome were significantly influenced by the senior supervising physician. What is improvement? (There was almost no stated consideration of possible environmental or development factors in behavior change. What kind of side effects occur and how frequent are they? (The side effects of Ritalin were reported to be minimal and to dissipate of their own accord.) When should cerebral stimulants be used? (Answers to this question ranged from "with all children suspected of minimal brain dysfunction" to "on a trial basis to get experienced use in case they might be helpful".) (Author/SB)

ABSTRACT 3818

Descriptors: hyperactivity; surveys, information dissemination; drug therapy; attitudes; exceptional child education; childhood; Freedman Report.

A two-phase survey was conducted to examine the impact of the "Report on the Conference on the Use of Stimulant Drugs in the Treatment of Behaviorally Disturbed Young School Children" (Freedman report) upon its intended audience. Questionnaires were mailed to professionals (in medicine, psychiatry, and education), public managers (for education and public health) and both randomly selected and concerned laymen (those who had requested information on hyperkinetics); the 1676 returned questionnaires were evaluated for awareness.

14 9
of drug treatment and attitudes toward its use, dissemination, and effect of the Freedman report, and sources of information about hyperkinesis. Among the results were that most respondents were aware of drug treatment, that the Freedman report was best known among professional in medicine and least known among laymen, and that the principal source of information on child hyperkinesis was professional literature. Recommended were the development of a dissemination base and publication of future communications with design and appearance consistent with audience preference. Included are figures such as a graph on the search for index medicine for journal articles, and attachments including literature on hyperkinesis. (For the text of the Freedman report see EC 03 2612 1 (SB)

ABSTRACT 3891
EC 07 3891 E D N. A.
Publ. Date 8/Fall 75 8p.
Ellis, Teresa; Justen, Joseph E.
Drug Therapy for the Hyperkinetic Child: Some Commonly Asked Questions and Answers.
Special Children, V2 N1 P5-11, 23 Sum/ Fall 75
Descriptors: exceptional child education; learning disabilities; hyperactivity; drug therapy.

Responses to common questions concerning drug therapy for the hyperkinetic child are given. Topics addressed include most frequently prescribed drugs, possible side effects, and length of treatment.
FOOD ADDITIVES/ALLERGIES

ABSTRACT 2357
EC 06 2357  ED N.A.  Publ. Date 74  77p.
Von Hildebrand, George

**Allergy, Toxins, and the Learning Disabled Child.**

Academic Therapy Publications, 1539 Fourth Street, San Rafael, California 94901 ($5.50).

Descriptors: exceptional child education; learning disabilities; emotional disturbance; behavior problems; biochemistry; nutrition; screening test; physical characteristics; Green Valley School

The relation of metabolic efficiency and systemic disease to learning disabilities, behavior disorders, and emotional disturbances are examined on the basis of the author's experience in his Florida school. Conditions thought to be related to allergies and toxins include hyperactivity, unusual fat metabolism; hypothyroidism; deficient absorption of vitamins; high values of lead, toxic metals and chemicals; and inability to process gluten, corn, food dyes and flavorings. Methods of screening children: allergens are detected including food dyes, rotary diets, fasting, drop tests and skin tests. Treatment regimens described involve improving absorption; prescribing lactobacillus acidophilus milk, yogurt or tablets, reducing stress; and hypodermic injection. Listed are minor physical anomalies found in learning disabled, brain damaged, and emotionally disturbed children, although no cluster of anomalies is associated with any disorder. Also included is a photographic essay of several children discussed in the book. (GW)

ABSTRACT 2572
EC 07 2572  ED N.A.  Publ. Date Jul 74  60p.
Hawley, Clyde; Buckley, Robert

**Food Dyes and Hyperkinetic Children. Academic Therapy.** V10 N1 P27-32 Jul 74

Descriptors: hyperactivity; nutrition; allergy; medical evaluation; medical treatment; exceptional child services; learning disabilities; physicians; Feingold (BF); Salicylate-Free Diet;

Described are medical procedures for testing hyperkinetic children for food allergies and reactions to products containing coal tar dye additives. It is recommended that patients demonstrating sensitivity to food additives be placed on a salicylate-free diet; and a list provided by B. Feingold, M.D. is given of foods, beverages, and drugs to be avoided. (LH)

ABSTRACT 2675
EC 07 2675  ED N.A.  Publ. Date May 75  5p.
Feingold, Ben F.

**Hyperkinetics and Learning Disabilities Linked to Artificial Food Flavors and Colors.**

EDRS no. 606830  American Journal of Nursing 75 (5) P769-703 May 75

Descriptors: exceptional child research; learning disabilities; hyperactivity; nutrition; medical treatment; nursing; food additives;

Discussed is the background of the author's research linking hyperkinesis and learning disabilities (H-LD) to artificial food flavors and colors. The incidence of hyperkinesis is seen to have increased in recent years and this is attributed to increased consumption of foods containing synthetic flavors and colors. Reactions to additives are given to include behavioral disturbances characteristic of hyperkinesia. It is reported that five separate dietary programs conducted with 194 hyperkinetic children showed that approximately 80% of the children responded to the strict elimination of food additives from the diet with the younger children responding more rapidly and completely. Possible pharmacological causes for the observed effects are noted. Relationships to other sensory problems such as aspirin and foods containing salicylates are considered. It is recommended that a list of food packages indicate the complete absence of artificial colors and flavors. (SM)

ABSTRACT 2724
EC 06 2724  ED N.A.  Publ. Date 73  170p.
Wunderlich, Ray C.

**Allergy, Brains, and Children Coping.**

Alan and Gladis Horowitz, Publishers, (CL)

Descriptors: exceptional child education; handicapped children; nutrition; physical development; learning; academic achievement; performance factors;

Reviewed is research relating nutrition to learning and school achievement in young children whose hyperactivity was treated by diet, and emphasized is the need for adequate nutrition instruction for children from all social and economic classes. (CL)

ABSTRACT 3479
EC 07 3479  ED N.A.  Publ. Date Jan 75  40p.
Smith, Nina Banton

**Child Nutrition in a Changing World. Childhood Education;** V51 N1 P142-145

Descriptors: exceptional child education; handicapped children; nutrition; physical development; learning; academic achievement; performance factors;

Reviewed is research relating nutrition to learning and school achievement in young children whose hyperactivity was treated by diet, and emphasized is the need for adequate nutrition instruction for children from all social and economic classes. (CL)

ABSTRACT 3899
EC 07 3899  ED N. A.  Publ. Date Nov 75  9p.
Raman, S. Padab

**Role of Nutrition in the Actualization of the Potentialities of the Child. An Anaia Perspective.**

Young Children; V31 N1 P24-32 Nov 75

Descriptors: exceptional child education; emotionally disturbed; hyperactivity; nutrition; intervention; child development; health; learning difficulties; biological influences; psychological characteristics; mothers; Anaia Theory;
The role of nutrition in child development is discussed in terms of early intervention programs and the Anisa theory of development. Nutrition's effect on achieving learning competence, the relationship between nutrition and emotional disturbances, and key points of intervention. It is noted that the Anisa theory recognizes two categories of developmental potentialities: biological (in which nutrition is the key factor to actualization) and psychological (in which learning is the fundamental factor). Evidence is seen to indicate that undernutrition interferes with central nervous system development and has effects which include loss of learning time. A significant number of severe learning impairments associated with hyperkinesia are reported to have been traced to nutritional imbalances and metabolic dysfunction amenable to diet therapy. It is suggested that intervention programs insure sound nutritional, psychological, and emotional states of the mother at least a year prior to conception and during the pre- and postnatal growth of the child.
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