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*Abstracts; *Annotated Bibliographies; *Audiology; Auditory Tests; *Aurally Handicapped; Deaf Interpreting; *Exceptional Child Research; Hearing Aids; Hearing Therapy; Manual Communication

**ABSTRACT**
The selected bibliography of research on aurally handicapped children contains approximately 95 abstracts with indexing information explained to be drawn from the computer file of abstracts representing the Council for Exceptional Children Information Center's complete holdings as of August, 1972. Abstracts are said to be chosen using the criteria of availability of document to user, currency, information value, author's reputation, and classical content. Preliminary information explains how to read the abstract (a sample abstract is included which identifies the different parts of the abstract), how to use the author and subject indexes, how to purchase documents through the Educational Resources Information Center Document Reproduction Service (an order blank is provided), an order blank for Exceptional Child Education Abstracts in which the abstracts are originally published, a list of indexing terms searched to compile the bibliography, and a list of journals from which articles are abstracted for the bibliography. Publication date of documents abstracted ranges from 1963 to 1971. (CB)
AURALLY HANDICAPPED—RESEARCH

A Selective Bibliography

August, 1972

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

(Exceptional Child Bibliography Series No. 625

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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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

**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).

**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.

**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**
(KK)

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**NOTE:** EDRS mf indicates microfiche reproduction only.
INDEXING TERMS SEARCHED

Indexing terms used to retrieve information on Aurally Handicapped Research from the Center's computer file of abstracts are listed alphabetically below:

Audiometric Tests
Audition
Auditory Evaluation
Auditory Tests
Aurally Handicapped
Cued Speech
Deaf
Deaf Education
Deaf Interpreting
Exceptional Child Education
Exceptional Child Research
Finger Spelling
Hard of Hearing
Hearing Aids
Hearing Loss
Hearing Therapists
Hearing Therapy
Manual Communication
Sign Language
Visible Speech

JOURNALS USED

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

American Annals of the Deaf
ASHA
Children's House
Exceptional Children
Journal of Auditory Research
Journal of Child Psychology and Psychiatry
Journal of Rehabilitation of the Deaf
Journal of School Health
Journal of Special Education
Journal of Speech and Hearing Disorders
Journal of Speech and Hearing Research
Laryngoscope
Teacher of the Deaf
TEACHING Exceptional Children
Volta Review

The abstracts in this bibliography were selected from Exceptional Child Education Abstracts, Volumes I-III.
ABSTRACT 10082
EC 01 0082  ED 012 987
Publ. Date 66  1959
Rainer, John D.; Altschuler, Kenneth Z.
Comprehensive Mental Health Services for the Deaf.
EDRS mtc

Descriptors: exceptional child research; audially handicapped; deaf; mental illness; mental health clinics; psychiatric services; children; adolescents; adults; medical treatment; occupational therapy; research needs; program descriptions; program evaluation; job placement; case studies (education); demonstration projects; mental health; psychiatric hospitals; medical evaluation; clinical diagnosis; group therapy; psychological services.

A 3-year pilot project designed to demonstrate the value and feasibility of providing comprehensive mental health (psychiatric) services for the deaf established a clinical unit for the deaf with inpatient, outpatient; and aftercare services. The clinic served 50 patients (minimum age 16) in the wards and 96 patients (all ages) in the outpatient service during this period. All clinic personnel were trained in manual communication and this facilitated diagnoses and treatment of the patients. Group therapy was found to be a very effective procedure with deaf patients. Occupational therapy and vocational placement services were provided in some cases. This program enabled discharge of almost 50 percent of the ward patients and facilitated improvement in one-fourth to one-third of the outpatients. The success of this project led to permanent establishment of the mental health clinic for the deaf. Important areas for future research are the development of techniques for preventive psychiatry and an exploration of the problems of rehabilitation for the deaf, especially the need for halfway homes. Case histories are presented as are protocols of the group therapy sessions. Figures, tables, charts, record forms, and operating procedures are available in the appendix. A 95-item bibliography is included. (RS)

ABSTRACT 10206
EC 01 0206  ED 018 016
Publ. Date 65  1970
Rainer, John D., Ed. And Others
Family and Mental Health Problems in a Deaf Population.
EDRS mtc

Aurally Handicapped Research

ABSTRACT 10310
EC 01 0310  ED 017 116
Publ. Date Sep 66  1959
Withrow, Frank B.; Lisensky, Robert
The Development of a Sex Education Curriculum for a State Residential School for the Deaf.
Illinois School For The Deaf, Jacksonville
OEG-32-23-0000-1030
EDRS mtc

ABSTRACTS

Descriptors: exceptional child research; audially handicapped; demography; genetics; etiology; deaf; intelligence tests; family relationships; socialization; vocational adjustment; educational background; achievement; crime; siblings; psychological testing; psychotherapy; psychiatric services; psychiatric hospitals; medical evaluation; research needs; state surveys; statistical surveys; mental health planning; Mental Health Project for the Deaf; New York

The final report of the Mental Health Project for the Deaf is presented. Following an explanation of the project and its procedures and an historical review of special education and mental health services are reports (by individual authors) of the research programs within the New York State deaf population. The reports consider (1) methodological aspects--sampling procedures; (2) demographic aspects--marriage, family, and fertility statistics, (3) genetic aspects of family deafness, (4) intelligence tests in deaf twins, (5) sexual patterns and family relationships, (6) patterns of socialization and community integration, (7) educational background and vocational adjustment, (8) deaf persons of outstanding achievement, and (9) delinquency and crime. Work on psychiatric considerations of the clinical outpatient program treats (1) operational description of a pilot clinic, (2) psychological testing--development and practice, (3) Rorschach data and clinical observations, and (4) psychotherapy for the deaf. For the clinical inpatient program, psychiatric considerations studied were (1) distribution and diagnosis of the New York State mental hospitals and (2) deafness and schizophrenia--a family study. Conclusions and recommendations made by the project treat (1) preventive mental health planning, (2) clinical management of deaf psychiatric patients, (3) areas for continued research, and (4) main findings and some projections. Graphs and tables appear throughout. A bibliography lists 253 items. This document is available from the Department of Medical Genetics, New York Psychiatric Institute, New York, New York. (JD)

ABSTRACT 10547
EC 01 0547  ED 023 248
Publ. Date Sep 68  1970
Ross, Mark; Lerman, Jay

ABSTRACTS

Descriptors: exceptional child research; audially handicapped; curriculum; sex education; educational programs; curriculum development; residential schools; deaf; children; curriculum research; curriculum planning; curriculum design; state schools; elementary; grades; instructional materials; secondary grades; adolescents; evaluation; curriculum evaluation; program evaluation; teacher workshops; information dissemination; tests; pretesting; post testing

To counteract the negative attitudes and abnormal behavior of children in residential schools, a sex education curriculum was developed by a study group composed of teachers of the deaf, social hygiene personnel, and a sociologist. A control group was obtained from the Indiana School for the Deaf matching factors such as age, sex, achievement, and IQ with an experimental group from the Illinois School for the Deaf. An education curriculum was presented to the experimental group. Films and existing materials were adapted for use with the deaf whenever possible. Classes were mixed rather than separated by sex. The class on the elementary level (ages 6 to 11) focused on family relationships and growth patterns; the adolescent class (ages 12 to 15) dealt with the concepts of entering adolescence and becoming adult, and the high school level (ages 16 to 18) focused on preparation for and acceptance into adult society. A pretest and a posttest were given. The adolescent and high school test was designed to measure information and attitudes covered in the materials developed in the social and personal hygiene curriculum guides. The test for the elementary group was designed as a nonverbal pictorial test. The experimental group of adolescents and the experimental high school age group scored significantly better (.01 level of confidence) on the posttest than the control group. Testing material may have contributed to the lack of significant difference on the elementary level. The materials and curriculum were evaluated by a study group after the experiment. The results of the experiment were also disseminated in a series of workshops. Suggestions for aiding other schools in establishing sex education programs are provided, including an inservice training program for both the academic and residential staffs and participation by the community and the parents. Sample tests, questionnaires, and responses are included. (AA BD)
Connecticut University, Storrs
Office of Education (DHHS, Washington, D.C., Bureau of Research)
EDRS m/fc
OEG-1-7-004038-0504
BR-7-8038

Descriptive: exceptional child research; aurally handicapped; tests; identification; hard of hearing; nonverbal tests; auditory discrimination; test reliability; correlation; word recognition; word lists; test results; deaf

The Word Intelligibility by Picture Identification Test (WIP) was developed to measure speech discrimination abilities in hearing impaired children. In the first phase of development, the word stimuli were evaluated to determine whether they were within the recognition vocabulary of 15 hearing impaired children (aged 6 to 12) and whether the pictorial representations of the words were adequate. The test was revised prior to the second phase to consist of 25 phases with six pictures on each plate, with only four of the pictures on each plate utilized as test stimuli. These four lists were given to 61 hearing impaired children (mean age of 10.2 years) with a range from 9 to 13.9 years; a hearing level in excess of 30 decibels at one or more of the speech frequencies; and an average speech threshold of 32.2 decibels on two separate occasions. There was a learning effect (p < 0.01) for three of the lists in the 1:3:2 week interval between tests. The results indicate reliability coefficients in excess of .87 for all four lists, with mean differences of less than 3% and correlation coefficients between lists greater than .84. (Author/ID)

ABSTRACT 10561
EC 01 0561
ED 023 203
Publ. Date Jan 68
Quigley, Stephen P.; And Others
Deaf Students in Colleges and Universities.
Illinois University, Urbana, Institute for Research on Exceptional Children Vocational Rehabilitation Administration (DHHS, Washington, D.C., Bureau of Education)
EDRS m/fc
RD-12995S

Abstract: exceptional child research; aurally handicapped; tests; test results; test reliability; test validity; auditory tests; auditory evaluation; evaluation techniques; hard of hearing; hearing loss; auditory discrimination; correlation; audiotory visual test; testing; Threshold by Identification of Pictures Tests; TIP; Discrimination by Identification of Pictures Test; DIP

The Threshold by Identification of Pictures (TIP) Test and the Discrimination by Identification of Pictures (DIP) Test were evaluated. Test cards used pictures of items from the first 500 words of Basic Vocabulary for Elementary Children, and the children pointed to the article named. After each item, the tester's voice was reduced 5 decibels. In the DIP test, pictures were arranged in rhymed pairs with a distinction in consonants between the two words. Of the 202 subjects, a random selection of 138 was used for final data analysis. Subjects were grouped by year (age range 4-10 to 12-10 years), and included a variety of degrees, types, and patterns of hearing loss. All were screened for significant visual, neurological, motor, and emotional problems. It was concluded that the TIP and DIP tests were satisfactory, with a threshold correlation of .98 with pure tone thresholds for the TIP test and a test reliability of .60 to .84 for the DIP test. Twenty-six references and 21 tables are given. (Author/ID)

ABSTRACT 10928
EC 01 0928
ED 026 772
Publ. Date Oct 67
Luterman, David M.
Emerson College, Boston, Massachusetts
Office of Educational Research (HEW), Washington, D.C., Bureau of Research
EDRS m/fc
OEG-1-6-062069.1591
RR-6-2069

Abstract: exceptional child research; aurally handicapped; parent education; preschool children; parent participation; hearing therapy; language development; deaf; group discussion; tutoring; behavior change; parent attitudes; speech interaction; staff orientation; evaluation needs; counseling instructional programs; Tracy Correspondence Course

To try to provide more capable deaf children through early parent education, eight families participated in a 2-semester program. Parents observed the children, age 16 to 3 1/2 years, receiving language stimulation in free play in a nursery and observed individual therapy based on the Tracy Correspondence Course. Non-directive group meetings encouraged parents to find their own solutions to problems. Therapists met with parents to discuss the goals and techniques of therapy; parents administered therapy first to another child and then to their own. Lecture type and fathers only meetings were also held. Evaluation of program success was based on staff observations of indicated growth and change in all of the children in and many parents. Almost all children were lipreading, using speech meaningfully and performing better in social and play situations. Parents seemed to be helped in resolving their initial confusion, in getting the problem of having a deaf child into perspective, in recognizing that the child was primarily language handicapped, and in appreciating the job of the therapist. (RP)

ABSTRACT 11042
EC 01 1042
ED N.A.
Publ. Date Jan 88
Meadow, Kathryn P.
California University, Berkeley

Expected Child Bibliography Series
considered for the revision were administered to normal hearing, deaf, and retarded subjects aged 3 to 17 years. Following the analysis, the retained items were grouped into 12 power sub-tests. Final samples consisted of 1,079 deaf children, mostly from schools for the deaf, and 1,074 hearing children, selected on the basis of parental occupation, over a 10-state area. Information is provided concerning normative, reliability, and validity data, and the performances of deaf and hearing children on other tests and on the H-N11.A. (MK)

**ABSTRACT 11264**

EC 01 1264 ED N.A.
Publ. Date Sep 65
23p.
Craig, Helen B.

A Sociometric Investigation of the Self-Concept of the Deaf Child. 
EDRS not available
American Annals Of The Deaf; V110 N4 P456-78 Sept 1965

Descriptors: exceptional child research; aurally handicapped; adjustment to environment; personality; tests; deaf; self concept; self esteem; environmental influences; peer relationships; test results; sociometric techniques; personality assessment

A study, to determine whether the deaf child's self concept is different from that of the normally hearing child, used 48 subjects from three school populations: an institutional school for the deaf, a day school for the deaf, and a normal public school. A perceptual sociometric test, which compared predicted sociometric ratings with actual ratings to give an index of perceived self, was administered to obtain measurements of self confidence, self direction, self acceptance, and social expansiveness. Results indicated that deaf groups were significantly lower (p less than .05) than the hearing group in self accuracy, and confirmed the hypothesis that language is essential to the development of self concept. The institutionalized deaf rated themselves higher in self acceptance than the other two groups; there was no significant difference among groups in self direction. Social expansiveness was lowest in the deaf non-institutionalized group and highest in the deaf institutionalized group. It was suggested that the high self acceptance of institutionalized deaf may be a function of their protective environment and that self concept among the deaf might be improved by revising deaf education to broaden language ability and to promote a wider range of experiences. (SN)

**ABSTRACT 11349**

ED 01 1349 ED N.A.
Publ. Date Mar 68
10p.
Vernon, McCay

Current Etiological Factors in Deafness.

Michael Reese Hospital And Medical Center, Chicago, Illinois, Institute For Psychosomatic And Psychiatric Research And Training

Social And Rehabilitation Service (D1EW), Washington, D.C.
EDRS not available
RD-2407-S
American Annals Of The Deaf; V113 N2 P196-15 Mar 1968

Descriptors: exceptional child research; aurally handicapped; etiology; deaf; hearing loss; premature infants; heredity; infectious diseases; rubella; incidence; age differences; hard of hearing; teaching methods

Causes of 1,468 cases of deafness with a hearing loss greater than 65 decibels were investigated. The leading causes of deafness were found to be heredity, prematurity, meningitis, maternal rubella, and the 8th factor; and since four of the five leading causes are also major etiological factors in brain damage, neurophysiological residua might explain many of the learning and behavioral handicaps present in deaf youth. In
30.4% of the cases the cause was unknown, and in 32.3% another or dubiously valid etiology was given. The high prevalence of premature birth (17.1%) was triple the expected figure. The present school age population was found to be about 5.5% post-lingually deaf in contrast to 40.2% in years past. However, the percentage of cases of unknown or nebulous determined cause was too low (over one-third) to permit an effective prevention program. (JH)

ABSTRACT 11437
EC 01 1437
ED N.A.
P0. Dohring, Donald G.; Rosensteim, Joseph
Joural Of Speech And Hearing Research; V12 N1 P118-25 Mar 1969

Abstract: Exceptional child research; aurally handicapped; visual perception; deaf; testing; visual stimuli; sight vocabulary; intelligence level; age differences; time factors (learning)

A test of visual perceptual speech was administered to 50 deaf and 50 hearing children equated in age, sex, and Performance IQ. The test included 13 subtests varying in stimulus complexity and verbal content. In each subject the subject was required to identify and underline the correct stimulus, which was interspersed among similar stimuli, as rapidly as possible. The hearing children scored significantly higher on 9 of the 13 subtests; older children scored significantly higher on all subtests; and there was a significant interaction between age and hearing status on only one subject. Correlations between subtest scores, reading vocabulary, and Performance IQ were also calculated. The results were discussed in terms of the specific task requirements of the visual perceptual speech tests. It was concluded that deficits of visual perception in deaf children should be interpreted in relation to age, education, language development, and reading achievement of the populations studied. (Author)

ABSTRACT 11519
EC 01 1519
ED 029 419
P0. Donald, Edgar I.
Home Teaching For Parents Of Young Deaf Children. Final Report.

John Tracy Clinic, Los Angeles, California
Office Of Education (DHHEW), Washington, D.C., Bureau Of Educa-
tion

Abstract: Exceptional child research; aurally handicapped; preschool children; auditory training; testing; hearing aids; parent counseling; multisensory learning; language development; articulation (speech); nursery rhymes; hard of hearing program evaluation; parent participation; speech skills; group therapy; preschool programs

Two groups of hard of hearing children entered educational audiology programs between the ages of 6 to 42 months. Of these, 12 children in a unisensory program (U) and 16 in a multisensory program (M) were evaluated for speech and language development after they had reached their fifth birthdays. Children in the experimental U-group were first tested for hearing and fitted with an aid, then were given auditory training at home and group therapy. At age 3, they were evaluated for placement in an enriched nursery school program, which also trained them primarily through the auditory sense. Guidance and psychological counseling were provided for the parents. Results indicated that the U-group was markedly superior on all measures of speech and language acquisition, although less so on the Goldman-Fristoe articulation test. On all other measures (mean length of responses, mean of five longest responses, number of one-word responses, number of different words, and structural complexity score), results for the U-group appeared to indicate the advisability of uni-sensory management. Findings suggested that U-management may be of most benefit to children whose residual hearing extends into the high frequencies and whose hearing losses are relatively flat. (JD)

ABSTRACT 11437
EC 01 1437
ED N.A.
P0. Vernon, McCay
Prevalence and Deafness: Incidence and Nature of Handicap Among Deaf Children.

EDRS not available

Abstract: Exceptional Children; V33 N5 P289-98 Jan 1967

Abstract: Exceptional child research; aurally handicapped; hearing loss; premature infants; hard of hearing; deaf; multiply handicapped; etiology; intelligence; academic achievement; minimally brain injured; neurological defects; audiometric tests; emotional adjustment; Bender Gestalt Test; Diagnostic Screening Form for Detection of Neurological Impairment in Deaf Children

To investigate the relationship between prematurity and deafness, 1,468 deaf or profoundly hard of hearing children (ages 3 to 21 years) were studied. Of these, 257 children had a birth weight of 5 pounds, 8 ounces, or less, and prematurity was the only known cause in 175 of the 257 cases. As birth weight dropped, IQ diminished appreciably (below 3 pounds, 4 ounces, the mean IQ was below 80). Data based on the Stanford Achievement Test scores, school records, and teacher evaluations indicated that these children achieved at half the rate of normal children and two thirds the rate of deaf children of deaf parents. One out of every five of the 175 was essentially unable to be educated. Psychological evaluations, teacher ratings, and school records revealed that one-fourth to one-third of the subjects had severe emotional problems; the Bender Gestalt Test, the screening for the therapy session, disclosed no neurological impairment, and audiograms indicated the presence of brain damage. The lower the birth weight, the greater the incidence of multiple handicaps (over
two-thirds of premature deaf children were multiply handicapped and the more serious the handicap. (AJ)

ABSTRACT 11699
EC 01 1699  ED 030 254
Publ. Date Dec 68  57p.
Restaino, Lillian C. R.
Identification, Assessment and Prediction of Reading Competency in Deaf Children. Final Report.
Lexington School For The Deaf, New York, New York Office Of Education (DHHS), Washington, D. C., Bureau Of Research
EDRS mf.hc
DEG-32-0000-6302
BR-6-1283

Descriptors: exceptional child research; aurally handicapped; reading ability; reading skills; reading difficulty; abstraction levels; memory; visual discrimination; visual perception; linguistic competence; tests; visual perception; cognitive processes

To investigate the underlying factors of visual discrimination, memory, rule abstraction, language, and serial ordering in reading success, 79 poor and 65 good deaf readers were administered a battery of tests. Poor readers were deficient in lower-order visual discrimination and memory abilities; higher-order visual discrimination skills were important to success for good readers. Higher-order rule abstraction skills were important for continued progress by the relatively successful readers; however, lower-order rule abstraction was important to successful visual discrimination at initial levels of reading for poor readers as well. Successful rule abstraction was significant at all levels of reading; visual discrimination (visual search and sequencing) was significant to the advanced reader for the processing of higher-order visual text. Implications were that rule abstraction is important at all levels of the reading process, visual discrimination activities at prereading and higher reading levels should be re-evaluated, and investigation is needed to determine sentence structures that are obstacles to progress beyond intermediate levels of reading. (Author)(RJ)

ABSTRACT 11747
EC 01 1747  ED N.A.
Publ. Date Mar 69  4p.
Harrelson, Orvis A. And Others
Comparison of Hearing Screening Methods.
EDRS not available
Journal Of School Health; V39 N3 P164-4 Mar 1969

Descriptors: exceptional child research; aurally handicapped; hearing screening; pure tone sweep tests; individual pure tone sweep tests (25 decibels ISO); group pure tone tests; and individual pure tone sweep checks (1,000, 2,000, 4,000 cps at 25 decibels ISO). Results indicated that the threetone screening method was significantly (0.001 level) superior to the other two methods in detecting hearing referrals. Single tone failure was a practical criterion in three-tone testing and was less practical for individual and group screening. The group testing procedure was inferior to the other two in determining hearing loss and was most costly. Performance of the three-tone technique required some time per pupil, and reliability, cost, ease of handling, and screen preference favored this method. (JH)

ABSTRACT 12043
EC 01 2043  ED N.A.
Publ. Date Sep 69  23p.
Vernon, McCay
Sociological and Psychological Factors Associated with Hearing Loss
EDRS not available
Journal Of Speech And Hearing Research; V12 N3 P341-63 Sep 1969

Paper Presented At Institute For Aural Rehabilitation (Denver, Colorado, July 1968).

Descriptors: exceptional child research; aurally handicapped; psychological characteristics; social factors; academic achievement; intelligence; communication skills; mental illness; research reviews (publications); employment patterns

Research reviews presented in the following areas reveal these results: the hearing impaired have essentially the same IQ distribution as the general population; the average deaf adult is grossly undereducated; the deaf frequently enter manual labor because of lack of opportunity to engage in appropriate higher level employment; 95% of the deaf marry other deaf persons; deaf adults have formed strong organizations to meet their needs; the deaf are not forced into a hearing or a deaf world but participate in both; impulse control problems and related syndromes are more common among the deaf and there is frequent lack of insight; the major handicap of deafness is impairment of communication; and employment trends suggest a vocational crisis for the deaf which indicates a need for more educational opportunities and aural rehabilitation. (RJ)

ABSTRACT 20287
EC 02 0287  ED N.A.
Publ. Date May 69  7p.
Neuhaus, Maury
Parental Attitudes and the Emotional Adjustment of Deaf Childhood.
EDRS not available
Exceptional Children; V35 N9 P721-7 May 1969

Descriptors: exceptional child research; aurally handicapped; deaf; parent attitudes; emotional adjustment; adolescents; mother attitudes; parent child relationships; fathers

The parents of 84 deaf children of three age levels (3 to 7, 8 to 12, and 3 to 19) were administered the University of Southern California Parent Attitude Survey and the Attitude Toward Disabled Person Scale to assess their attitudes toward children and toward disability. Teachers used the Harrelson-Orvis-Aaronson-Wickman Behavior Rating Schedule to rate the children's emotional adjustment at school. Results indicated that there is a significant relationship between maternal and paternal attitudes toward children and the child's emotional adjustment at all age levels, with one exception: the fathers' attitudes toward children between ages 3 to 7. Where parental attitudes differed, the maternal attitude outweighed the paternal attitude in its effect upon the child's emotional adjustment. No significant relationships was found between parental attitudes toward disability and the child's emotional adjustment. Parental attitudes toward children did not vary with the age of the child, while parental attitudes toward disability did. Parents of deaf children were more accepting of disability when their children were young. (Author)(RJ)

ABSTRACT 20344
EC 02 0344  ED N.A.
Publ. Date Jul 69  10p.
Quigley, Stephen P.
Higher Education for Deaf Persons in Regular Institutions.
EDRS not available
Journal Of Rehabilitation Of The Deaf; V3 NI P34-43 Jul 1969

Descriptors: exceptional child research; aurally handicapped; college attendance; questionnaires; socioeconomic status; educational background; counseling services

To determine whether deaf persons were successful in attending regular colleges, 5 groups of the deaf (in alphabetical order, those with a B.A., those without, those in attendance at the time of the study, those who began in regular colleges but transferred to Gallaudet, and Gallaudet graduates who attended graduate school in regular institutions) were sent questionnaires. The major results based on 653 acceptable returns were as follows: group A had E were generally as successful as the general college educated population, but group E came from a lower socioeconomic status and attended combined residential schools rather than oral; groups B and D had lower grades throughout their educational careers and group C, being young and reflected the emphasis of the past 20 years and showed the tendency to use hearing aids; they also received more home training. Conclusions: and implications are that those who did not complete the college course were those who were perhaps not as academically capable, that counseling is needed regarding
Aural Handicapped: Academic Achievement: National Surveys. Statistical data; test validity; test reliability; age differences; deaf; hard of hearing; achievement tests; Stanford Achievement Tests

The objectives of the annual survey of hearing impaired children and youth which are presented are to collect, process, and disseminate statistical information on characteristics of all hearing impaired individuals through college age. One aspect of this work is described through results of the administration of the Stanford Achievement Tests (Forms W) to about 12,000 hearing impaired children from 70 schools and 39 classes, a description of the tests, the methodology, and sources of the data, and the qualifications and limitations of the data are included. Also provided are detailed tables of the results of the test batteries and a description of these tables. It was noted that the test results should be considered limited because the Stanford Achievement Tests were developed for hearing students. Appendices include an annual census form, a description of the sub-tests of the W series, and a list of participating schools.

Descriptors: exceptional child research; aurally handicapped; academic achievement; national surveys; statistical data; test validity; test reliability; age differences; deaf; hard of hearing; achievement tests; Stanford Achievement Tests.

ABSTRACT 20974
EC 02 0974
ED 033 514
Pub. Date 69
59p.
Verbal Behavior of the Deaf Child: Studies of Word Meanings and Associations, TC Series in Special Education.
EDRS not available
Teachers College Press, Columbia University, 525 West 120 Thc Street, New York, New York 10027.

Descriptors: exceptional child research; aurally handicapped; language ability; associative learning; age differences; word recognition; testing; vocabulary skills; association (psychological); paired associate learning.

Results are reported of five studies of word meanings and associations of the deaf child. Subjects from two oral schools for the deaf and a group of normally hearing students were given a word association test. The generally higher same form class responses of subjects form oral school B were thought to reflect their language instruction which emphasized grammatical structure. On a continuous association task, deaf children performed relatively well compared to a standard for hearing children in grade 7. On a test of written meanings, results revealed that deaf children used more associations in defining than hearing children, and they gave fewer adequate definitions. Another investigation showed that the two groups of deaf children were less able than the hearing to identify synonyms and associations correctly. In a study of alternative word meanings, the item context had essentially no effect on the performance of deaf subjects while the performance of hearing subjects was depressed by misleading contexts. The overall results showed the deaf to be deficient in verbal association in comparison to the hearing and showed a lack of improvement with age in the deaf groups. It was suggested that verbal achievement and behavior patterns of the deaf be studied without continuous comparison with the hearing. (R)

ABSTRACT 20983
EC 02 0983
ED 033 523
Pub. Date Sep 69
50p.
Academic Achievement Test Performance of Hearing Impaired Students, United States: Spring 1969. Data from the Annual Survey of Hearing Impaired Children and Youth.
EDRS not included

Descriptors: exceptional child research; aurally handicapped; academic achievement; national surveys; statistical data; test validity; test reliability; age differences; deaf; hard of hearing; achievement tests; Stanford Achievement Tests.

The use of the Language Master machine for vocabulary instruction with hearing impaired children was examined to compare its effectiveness with traditional teaching procedures. The results showed no significant differences in vocabulary gains between the two methods, but the authors suggested that the use of the Language Master provides the additional advantages of freeing the
teacher from certain routine activities, and enabling the child to assume increased independence and participation in the learning process. (RD)

ABSTRACT 21231
EC 02 1231 | ED 003 310
Pub. Date May 64 | 66p.
Birch, Jack W.; Stackless, F. Ross
EDRS m/l.e
OEC-3 10-078 | CRP-1769
Descriptors: exceptional child research; aurally handi capped; achievement; communication (thought transfer); language skills; psychological processes; language use; speech development; speech skills; reading skills; writing skills; verbal; personal adjustment; language development; social adjustment

An investigation was undertaken to determine whether early manual communication with deaf children influences their subsequent acquisition of intelligible speech, reading ability, speech reading ability, written language, and psychosocial adjustment. The design involved paired sets of subjects because of the large number of variables which needed to be controlled. Early manual communication was the independent variable. One subject of each matched pair was a deaf child who had learned manual communication from infancy. The other was a deaf child who had not. From five schools for the deaf, a preliminary matching led to 105 children of deaf tests, 337 deaf children of hearing parents. All children were 10 years of age or older. Data collected by parental questionnaires were used in pairing of children. Pairs of subjects were matched and tested with regard to several variables. The deaf children who had learned to communicate manually from infancy were superior to the group without early communication experiences in speech, reading, written language. It was concluded that, when the influence of early manual communication is present, this influence helps the development of conventional language skills. (JC)

ABSTRACT 21477
EC 02 1477 | ED 034 349
Pub. Date Jul 69 | 94p.
Hanson, Grace Hcn And Others

Aurally Handicapped Research

Texas University, Austin Office Of Education (DE19W). Washington, D.C. Bureau Of Research
EDRS m/l.e
OEC-4 7-002253-2051 | BR-6 253
Descriptors: exceptional child research; aurally handicapped; perception; psychological attributes; academic achievement; visual perceptual characteristics; perceptual motor coordination; reading; language ability; deaf

To determine whether interrelationships existed among visual-motor perception, linguistic skills, academic achievement, and the audiological status of deaf children, 199 subjects functioning from dull normal to superior in intelligence (IQ 5.6 to 11) were studied. The results of the testing revealed that visual motor-perceptual dysfunction is more frequently found in deaf than hearing children, and this lag seems to be the result of brain damage; a visual perceptual lag is more often found in those who test at a dull normal level; and a positive relationship exists between visual motor perception and intelligence, linguistic ability, and academic status. Some recommendations were that differential diagnostic testing should include assessment of visual motor perception functions. Testing in this function should be emphasized throughout elementary school, motor encoding should be used for concept learning, a refined teacher evaluation scale for assessing language is needed, and further studies along these lines should be made. (Author/JM)

ABSTRACT 21474
EC 02 1474 | ED 034 352
Quigley, Stephen P.
Research on Some Behavioral Aspects of Deafness.
Illinois University, Urbana. Institute Of Research On Exceptional Children.
Rehabilitation Services Administration (DE19W). Washington, D.C.
EDRS m/l.e
OEC-8-000640-1863(032) | BR-7 0640
Descriptors: exceptional child research; aurally handicapped; classroom communication; classroom observation techniques; interaction process analysis; student teacher relationship; age differences; communication (thought transfer); teaching methods; oral communication; manual communication

To develop a system for making systematic observations of classroom communicative interactions, to provide guidelines for its utilization, and to suggest applications of this system to problems in the development of communication skills, 94 deaf children were directly observed in class interaction. An evaluation instrument was developed from the Flanders system and employed 20 categories and 11 modes of description. Results showed that in all grade levels the majority of communication was teacher initiated, but that at higher levels there was a gradual increase in student response and initiation. Questioning and informing were the two most frequently observed categories used by teachers in both language-dependent and specialized instruction; these categories were also the ones used most frequently by students in initiating communication. The oral mode was predominant at primary and intermediate levels in the day and residential schools in which data was gathered, but non-oral modes increased noticeably on the high school level in the residential school but not in the day school. Suggestions were that this instrument be used in further research to adjust the behavior of students and teachers. (JM)
To modify behavior and teach basic skills and subject matter, 16 emotionally disturbed deaf boys were involved in a pilot project to enable them to return to regular classes. The program featured a small staff-pupil ratio. application of behavior modification techniques, engineered instruction. individualized self-instructional curriculum materials, coordinated classroom and dormitory activities, manual communication, and parent education. Results showed that changes in class conduct and self-control were significant; reading skills showed good improvement; significant gains were made in arithmetic; interpersonal rapport improved among the boys and also with adults; and parents were enthusiastic about changes in their children. One of the 16 boys is deceased, one returned to a psychiatric hospital, and eight of the remaining 14 became successful participants in regular classes for the deaf. Extensive appendices, tables, lists of figures pertaining to the project results, and case studies, are included.

To determine whether and to what extent a measure of intelligence adds to the predictive efficacy of self-concept of academic ability in hearing impaired students, 80 students from grades 10, 11, and 12 were studied. Comparative data came from approximately 1800 nonimpaired tenth grade students. Measures used were intelligence, grade point average (GPA) in academic subjects, and self-concept of academic ability (SCA). The results showed that the correlation between SCA and GPA is always larger than that between IQ and GPA; since SCA and IQ show less than 25% shared variation, the inference is that they do not measure the same thing; and behaviors of the hearing impaired and nonimpaired are similar enough to use the same measurement formula. The author's conclusion is that the student's estimate of his ability may affect his achievement more than his intelligence. Tables of results and measurement formulas are included.

To provide a quantifiable instrument for direct observation and measurement of communication in classes for deaf children, an instrument based on Flander's categories was developed and tested. The system used 20 categories of communication behavior that were initiated, nine student initiated, and two lack of communication (and 11 modes of communication); classes from primary through high school were observed. The results indicated that teachers dominated initiation of classroom communication, that questioning, and informing were the most used categories, that in the lower grades informing was the most frequent student response while in high school questioning was, and that no real relationship could be discovered between modes of communication and categories. Conclusions were that the instrument appeared effective for observation, and that research is needed into the relationship of teacher versus student initiated communication.

Two studies were made of the Rochester Method of combining fingerspelling with speech and of its effects on development of language and communication in profoundly, prelingually deaf children. A survey tested school performances of 200 subjects from six residential schools for the deaf, three of which used the Rochester Method and three which used various combinations of oral and manual communication methods.

Descibers: exceptional child research; aurally handicapped; emotional disturbance; case studies (education); behavior change; parent attitudes; reading achievement; arithmetic; parent counseling; program evaluation; reinforcement; student evaluation; clinical diagnosis; adjustment (to environment)

To modify behavior and teach basic skills and subject matter, 16 emotionally disturbed deaf boys were involved in a pilot project to enable them to return to regular classes. The program featured a small staff-pupil ratio. application of behavior modification techniques, engineered instruction, individualized self-instructional curriculum materials, coordinated classroom and dormitory activities, manual communication, and parent education. Results showed that changes in class conduct and self-control were significant; reading skills showed good improvement; significant gains were made in arithmetic; interpersonal rapport improved among the boys and also with adults; and parents were enthusiastic about changes in their children. One of the 16 boys is deceased, one returned to a psychiatric hospital, and eight of the remaining 14 became successful participants in regular classes for the deaf. Extensive appendices, tables, lists of figures pertaining to the project results, and case studies, are included.

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Descibers: exceptional child research; aurally handicapped; emotional disturbance; case studies (education); behavior change; parent attitudes; reading achievement; arithmetic; parent counseling; program evaluation; reinforcement; student evaluation; clinical diagnosis; adjustment (to environment)
pre- and post-program testing, rating committees, and degree of job satisfaction (employee, employer). Results indicated that comprehensive supportive measures can provide a means of assisting the handicapped impaired to develop their full educational potential within educational facilities for the normally hearing. The study recommends wider establishment of supportive programs, creation of multidisciplinary training ships, national consultant pools, and central data collection. (Author)

**ABSTRACT 22546**

EC 02 2546 ED 038 816
Publ. Date Jul 69 169p.
Neyhus, Arthur I. And Others
Speech Reading Failure in Deaf Children. Final Report.
Northwestern University, Evanston, Illinois, Institute For Language Disorders Office Of Education (DHEW), Washington, D.C., Bureau Of Education For The Handicapped
EDRS mf hc
OEG-3-706582-2084
BR-6-2582

Descriptors: exceptional child research; aurally handicapped; lipreading; success factors; deaf; language skills; memory; intelligence factors; neurological defects; visual perception; auditory perception; hearing loss; verbal ability; nonverbal ability; reading comprehension; composition skills (literary); motor development; sensory integration

To investigate the problem of speech reading failure, a battery of tests was administered to 60 deaf children, half of them poor learners and half good. Results indicated that those who developed speech reading failure did so at an early age and could deal with words, phrases, and sentences spoken at any rate whereas poor learners comprehend only words spoken slowly. Good learners were superior on measures of intellectual ability, reading comprehension and written language, and sequential and spatial memory. Factorial analyses also indicated that the good learners had more highly integrated and organized mental abilities. Neurological studies revealed positive neurological signs in poor learners; electroencephalographic studies did not discriminate significantly between the good and poor learners but did distinguish between the brain functioning of deaf and hearing children; ophthalmological studies indicated a high incidence of visual abnormalities in both experimental groups. (Author/ID)

**ABSTRACT 22598**

EC 02 2598 ED N.A.
Publ. Date 70 289p.
Rainer, Ione D., Ed. And Others
Family and Mental Health Problems in a Deaf Population. Second Edition. EDRS not available
Charles C. Thomas, Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 ($12.00).

Descriptors: exceptional child research; aurally handicapped; mental health; psychiatric services; psychological evaluation; adults; psychotherapy; twins; statistical data; communication problems; research needs; family problems; personality; emotionally disturbed

In response to the growing concern with the psychiatric needs of the deaf, information from two statistically representative and independent samples, the total New York State population of literate deaf persons over 10 years of age, and deaf twins of all ages living in the eastern half of the United States, were studied. The report contains results of research, programs, psychiatric treatment areas, and outlines recommendations for future work. Chapters on deafness and depression, and communicating with the deaf have been added. (GID)

**ABSTRACT 22656**

EC 02 2656 ED N.A.
Publ. Date Jul 70 11p.
Craig, Helen B.
Reinforcing Appropriate Visual Attending Behavior in Classes of Deaf Children.
EDRS not available
American Annals Of The Deaf; V115 Nos. 4-5 Jul 1970

Descriptors: exceptional child research; aurally handicapped; reinforcement; visual learning; attention control; operant conditioning

Three experiments were undertaken involving aurally handicapped children with visual attending problems (ages 6 to 10 years) to determine whether or not operant conditioning could increase visual attending. From lows of attending approximately 25% of the time, at the end of the experiments the attending time had increased to about 80% overall. The experiments used behavior modification techniques including positive reinforcement (with and without extinction) with and eventually only social reinforcement. The experiments were considered a success. (JM)

**ABSTRACT 22772**

EC 02 2722 ED 039 664
Publ. Date Jan 70 97p.
McConnel, Freeman; Horton, Kathryn B.
Vanderbilt University, Nashville, Tennessee, School Of Medicine Office Of Education (DHEW), Washington, D.C., Bureau Of Research
EDRS mf hc
OEG-32-504250-6007
BR-6-1178

Descriptors: exceptional child research; aurally handicapped; preschool programs; parent participation; auditory training; auditory evaluation; hearing aids; parent education; deaf; language development; hearing loss; parent attitudes; infancy

A demonstration home provided a parent oriented project and audiovisual management for 94 deaf preschoolers (mean age 2 years 4 months). Each child underwent a trial period with different hearing aids before permanent recommendation was made. Parents were present at these clinic sessions; they also received instruction in how to encourage auditory behaviors, orient the child to sound, and talk to the child. Findings over 3 years indicated that language age growth accelerated while performance age and nonverbal mental age remained linear. Also, ability to use amplification from the wearable hearing aids improved, with an improved mean threshold response to spoken voice of more than 20 db. The parents mobilized themselves into pressure groups resulting in legislation for education of deaf preschoolers. Community approval of the project resulted in continuance of its services after federal funding ceased. (Author/ID)

**ABSTRACT 22738**

EC 02 2738 ED 039 680
Publ. Date Feb 70 66p.
Luterman, David M.
Emerson College, Boston, Massachusetts Office Of Education (DHEW), Washington, D.C., Bureau Of Research
EDRS mf hc
OEG-1-60669-1591
BR-6-2069

Descriptors: exceptional child research; aurally handicapped; preschool programs; parent participation; parent education; academic achievement; infancy; nursery schools; parent attitudes; language development

A nursery program for 48 deaf children aged from 1½ to 3 years require active participation of the parents. Parents selected the program, tutored their and other children, observed behavior in the nursery which included hearing children, and participated in discussion of family problems. In followup, about three-fourths of the children and of their parents were rated above average by classroom teachers of the deaf. However, these results may have been due to the passive admission procedures. Parents who were not middle class seeking or who had severe personal problems did not appear to benefit. Those who were active lobbyists for deaf children in the state. (Author/ID)

**ABSTRACT 22763**

EC 02 2763 ED N.A.
Publ. Date Sep 66 12p.
Giacocco, C. Joseph
The Hiskay-Nebraska Test of Learning Aptitude (Revised) Compared to Several Achievement Tests. Iowa School For The Deaf, Council Bluffs
EDRS not available
The purpose of this research was to explore the relationship between the learning age obtained in the Hiskey-Nebraska Test of Learning Aptitude and several achievement scales to determine whether the Hiskey test could be used as a predictor of academic achievement for deaf children. Subjects were 235 deaf children broken into seven groups by age and grade level. Tests administered along with the Hiskey-Nebraska were the Stanford Achievement, Gates Reading, and Metropolitan Achievement Tests. A Teacher Rating Scale was also used. Arithmetic Computation and Arithmetic Reasoning showed the highest and most consistent correlations at all age levels (generally at the .85 level of confidence). Low correlations obtained mostly in areas requiring reading skills. Significant and high correlations (.85 significance on all tests) were found in the low mental age obtained in the Hiskey-Nebraska Test. However, five significant correlations (.80 significance) were obtained for the opposite mental years (fifth through ninth year levels). The cause of failure was not determined, but several causes were suggested. Three graphs and 26 correlation tables are provided. (HK)

ABSTRACT 22873
EC 02 2870
ED 040 525
Publ. Date 69
Quigley, Stephen P., and Others
Economic and Occupational Status of Young Deaf Adults in Illinois.
Illinois University, Urbana, Institute for Research on Exceptional Children
Rehabilitation Services Administration (DHEW), Washington, D.C.
EDRS m/4e

Descriptors: exceptional child research; aurally handicapped; educational, occupational surveys; group status; academic achievement; job placement; day schools; residential schools; vocational adjustment; questionnaire; educational status comparison

A questionnaire was used to obtain information from 464 hearing impaired individuals concerning occupational status and to determine any relationship between types of educational programs attended and later occupational achievement. Subjects had attended exclusively one of four types of programs: residential, day school programs in Chicago, day school programs in other areas of Illinois, and public school classes for the general public. Analysis of the data revealed similarities among groups in wages received for given occupations and job satisfaction. Residential groups reported lower hearing ability and social-economic status than nonresidential groups. Most nonresidential groups reported more professional, technical, and clerical employment; more social and marital involvement with normally hearing person; better oral communication skills; a greater value on oral communication as related to job performance and advancement. (JB)

ABSTRACT 22870
EC 02 2870
ED 040 522
Publ. Date Oct 69
McCormick, Freeman and Others
Final Report.
American School and Hearing Association, Washington, D.C. Joint Committee on Audiology and Education of the Deaf
Office of Education (DHEW), Washington, D.C.
EDRS m/4e
OEG-0-8-071039-0188(032)
BR-7-1039

Descriptors: exceptional child research; aurally handicapped; educational needs; identification; educational programs; classes; deaf; hard of hearing; public schools; special schools; state agencies; professional personnel; ancillary services

Descriptive data were gathered from state departments of education and health, local school districts, speech and hearing centers, and residential and day schools for the deaf and hard of hearing. Site visits were made to 10 school districts. Results demonstrated that more emphasis was being placed upon the identification of children with hearing loss than upon the education and continued re-evaluation of these children. Site visits confirmed the impression that there was a lack of understanding of the special educational needs of hard of hearing children. School programs were generally unable to affect identification or educational programs. Schools for the deaf were frequently required, by defacto, to accept hard of hearing children, but only infrequently made special provisions for them. Clinics identified their chief function as providing identification and communication services for preschool children. Recommendations were made involving educational, leadership, and research needs. (Author/ID)
The development and progress of 20 children in a residential oral school for the deaf were studied over 7 years through testing, observation, and examination of school records. Follow-up was done when the children were in their 10th and 11th years of school. Audiologic examinations were also given. Results indicated that none of the 20 had his deafness discovered in infancy or received follow-up by immediate, parent oriented therapy. One-fourth of the group should have been placed in programs for the hard of hearing, not deaf; one-third in programs for the multiply handicapped. Boys were more handicapped in learning than were girls. Educational needs involved consideration of the effects of early residential placement and alternatives to it and better understanding of language learning and of developmental stages of growth and emotional factors in learning. (Author)
The extent of hearing loss, the audiometric configuration, the sound awareness levels for complex sounds, and the response to amplification were studied in a selected sample of 19 hearing-impaired children born during the 1963-64 rubella epidemic in the mid South. The children ranged in age from three years-eight months, to three years-eleven months. Their physical growth and development were assessed, and their intellectual functioning was evaluated with selected items from the Nebraska Test of Learning Aptitude. The degree of hearing loss and the configuration in general were compared to studies by Fisch, et al. The lack of any one, predominant type of audiometric curve in the sample suggests the 1963-64 rubella child cannot be easily categorized.

It was found these children were afflicted with rather profound hearing losses, and that after the occurrence of rubella in the mother the less severe hearing loss in the child. The height, weight, and head circumferences measured below age level. Intellectual functioning was found at or above age level in opposition to findings of Myklebust, Vernon and Miller; however, these children had all received structured home teaching. (GD)

**ABSTRACT 30014**
EC 03 0014  ED 043 141
Publ. Date Aug 70  13p.
Lamb, Carroll D.; Gwaltney, Thomas Lary
Title VI Hearing-Handicapped Preschool and Kindergarten Levels.
Wichita Unified School District 259, Kansas
Kansas State Department Of Public Instruction, Topeka
Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education
EDRS no,he

Descriptors: exceptional child research; aurally handicapped; preschool education; kindergarten; sensory training; communication skills; experimental programs; special classes; Kansas

Two special classrooms were provided for 20 students at the preschool and kindergarten level who had severe hearing impairments. Two teachers and two instructional aides conducted classroom activities centered around sense training (visual, tactile, and auditory experiences). Speech development and communication skills were desired outcomes. To measure student gains in eight subtest areas, the Nebraska Test of Learning Aptitude was administered. In one year, the preschool students made and average growth of one year and 11 months in mean learning age. The kindergarten group showed an average gain of one year and five months in mean learning age. Student records, samples of classwork, and teacher written reports on each student (including sense training, socialization, responsibility, basic learning skills, and language development) correlated with the test data. (KW)

**ABSTRACT 30018**
EC 03 0018  ED 043 144
Publ. Date May 70  6p.
Asp, Carl W.
The Effectiveness of Low-Frequency Amplification and Filtered-Speech Testing for Preschool Deaf Children.
Interim Report.
Tennessee University, Knoxville Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS mfe,he
OEG-09-5.22113-3339(032)
BR-52-2113

Descriptors: exceptional child research; aurally handicapped; hearing aids; auditory training; preschool children

To evaluate the effectiveness of low-frequency amplification, three classrooms were equipped in an experimental design in which the teacher spoke simultaneously through two different amplifying systems, a low-frequency unit, the Zenith Vocalizer (the Mini Suzag, capable of simultaneously responses similar to the training units), and a conventional unit (Warren T-2). Thirty preschool deaf children were matched and assigned to either unit. The same type of output transducers were utilized for all the children. Teachers used the Verbal Method (primarily an auditory program) for habilitation. The low-frequency unit produced a greater acoustic response below 500 Hz. Hearing aids were selected that produced frequency responses similar to the training units (the Mini Suzag for children on the low-frequency unit, the Zenith Vocalizer III for the conventional unit). A Bruel and Kjaer II system was used to evaluate the training units and hearing aids. The Mini Suzag, capable of simultaneously driving a vibrator and a headset, had a greater low-frequency response. (KW)

**ABSTRACT 30086**
EC 03 0086  ED N.A.
Publ. Date Sep 70  6p.
Lasch, Rosemary And Others
Early Speech Development in Deaf Infants.
EDRS not available
American Annals Of The Deaf; V115 N5 P522-6 Sep 1970

Descriptors: exceptional child research; aurally handicapped; speech; infants; phonology; deaf; developmental vocabulary

The study recorded the phonological development of seven deaf children, initially aged 11 to 32 months, during the first year of a parent-guidance program emphasizing vocalization and optimal use of residual hearing. Tape-recorded samples of 30 vocabulary were periodically transcribed and analyzed. Results show that central vowels tended to predominate at all stages. Phonemes used by the children increased during training, though performance remained inferior to that of hearing children previously studied. Significant gains made through training indicate that early speech rehabilitation can be advantageous to the young deaf child. (KW)

**ABSTRACT 30087**
EC 03 0087  ED N.A.
Publ. Date Sep 70  10p.
Voris, McCoy; Koh, Soon
Early Manual Communication and Deaf Children's Achievement.
EDRS not available
American Annals Of The Deaf; V115 N5 P527-36 Sep 1970

Descriptors: exceptional child research; aurally handicapped; manual communication; finger spelling; sign language; oral communication; social adjustment; academic achievement; communication skills; deaf

Research on the effects of fingerspelling and the language of signs on the educational and social development of deaf children is summarized. Reported is a study comparing deaf students who were exposed to manual communication from infancy with students exposed to oral communication alone (speech, speech reading, and amplification). Areas of comparison were academic achievement, communication skills, and psychological adjustment. It was found that the early manual communication students exhibited better overall educational achievement (including superiority in reading skills and written language). No differences were found in general intelligibility and speech reading, or in psychological adjustment. It is concluded that early manual communication facilitates educational achievement and linguistic development, and does not hurt speech and speech reading skills or psychological adjustment. (KW)

**ABSTRACT 30098**
EC 03 0098  ED 043 172
Publ. Date Dec 69  36p.
Matkin, Noel D.
Analysis of a Recorded Test for the Measurement of Hearing in Children.
Northwestern University, Evanston, Illinois, Department Of Communicative Disorders
Office Of Education (DHEW), Washington, D. C., Bureau Of Education For The Handicapped
EDRS no,he
ABSTRACT 30347
EC 03 0347 ED N.A. Publ. Date 69 12p.
Redell, Rayford C.; Calvert, Donald R.
Factors in Screening Hearing of the Newborn.
San Francisco Hearing And Speech Center, California
EDRS not available Journal Of Auditory Research; V9 N3 P278-89 1969

Descriptors: exceptional child research; aurally handicapped; hearing loss; screening tests; infancy; nursing

A pilot study was conducted on 3200 neonates to determine the efficacy of screening hearing of the newborn. Also evaluated through studies on 2180 additional neonates were the nurses' training to conduct the screening, and various commercial screening equipment. Studied were characteristics of the child's response to different types of stimuli, sound pressure level, and behavioral condition of the baby when tested. It was learned that a nurse can be trained within two weeks, that a broad-band noise stimulus is more efficient than high-frequency warbled tones in evoking a response, and that screening was effective in identifying hearing loss in newborns in other than a high-risk category, as shown by followup studies. (KW)

ABSTRACT 30349
EC 03 0349 ED N.A. Publ. Date May 70 11p.
Rapin, Isabelle; Isabelle And Others
Diagnosis of Hearing Loss in Infants Using Auditory Evoked Responses.
EDRS not available Laryngoscope; V80 N5 P712-22 May 1970

Descriptors: exceptional child research; aurally handicapped; hearing loss; audiometric tests; infants; stimulus behavior

Eighty-six infants under one year of age were tested for hearing loss by recording auditory evoked responses (AER) during sleep. Responses to 100 presentations of a varying-frequency stimulus were recorded. Data show that a valid clinical assessment of peripheral auditory function by AER testing can be obtained in infants under one year of age. Where threshold determination was made on the first test in 75% of the cases, there was an excellent correlation with clinical follow-up. In no case was hearing worse than originally estimated. The median follow-up time was nine months for the 27 infants followed-up. (KW)

ABSTRACT 30350
EC 03 0350 ED N.A. Publ. Date Jan 70 7p.
Power, D. J.
Skills Involved in Teaching the Deaf - A Factor Analytic Study.
EDRS not available Teacher Of The Deaf; V68 N399 P13-9 Jan 1970

Descriptors: exceptional child research; aurally handicapped; teaching methods; teacher evaluation; evaluation methods

A Teaching Evaluation Report composed of 39 items was constructed and used as ratings for six teaching rounds with 47 children. The results of a factor analytic study indicated that many of the classroom skills involved in teaching deaf children are closely related to the skills necessary for teaching elementary school age hearing students. Oral and manual communication factors and a speech teaching factor appeared to be the skills specific to teaching deaf children. (Author/ED)

ABSTRACT 30512
EC 03 0512 ED 015 603 Publ. Date 66 132p.
Kiani, Bijen
Minnesota University, Minneapolis Office Of Education (DHEW), Washington, D. C.
EDRS m,hc OEG-7-33-0400-230 BR-1204
University Of Minnesota Bookstore, Minneapolis, Minnesota 55455.

Descriptors: exceptional child research; aurally handicapped; reading materials; teaching methods; beginning reading; teaching machines; programmed instruction; reading instruction; programmed materials; Honeywell University of Minnesota Teaching Device (HUMID)

To teach beginning reading to hearing impaired children through visual presentations, the project designed and built a teaching machine, generated programs, and tested the system at Honeywell University of Minnesota Teaching Device or HUMID. Programs incorporated various techniques and new approaches. To test one of the programs with deaf and hard of hearing children, a group of 10 first graders and a group of 9 and 10 year old students from a remedial class were taught 34 programs. Control groups were also formed. Results of a test showed the concepts of the programs showed the first grade experimental group scored significantly better (at the .01 level) than its control group; the remedial experimental group scored better (not significantly) than its control group. On standardized tests the first grade experimental group approached a difference of statistical significance with scores higher than their control group, but no significant differences were found between the remedial experimental and control group. Additional studies are reported. It was concluded that an automated system in the form of teaching machines can be developed and that teaching machines have a place in classrooms for the deaf. (MS)

ABSTRACT 30584
EC 03 0584 ED 044 001 Publ. Date 70 13p.
Boothroyd, Arthur
Sensory Aids Research Project--Clarke School for the Deaf Clarke School For The Deaf, Nor- thampton, Massachusetts

Descriptors: exceptional child research; aurally handicapped; sensory aids; sensory training; hearing aids

Described is a program of research into sensory aids for the deaf, emphasizing research on factors involved in the effective use of sensory aids rather than evaluation of particular devices. Aspects of the program are the development of a programmed testing and training unit, the control of fundamental voice frequency using visual feedback, and tactile stimulation using a wearable hearing aid. The experiments conducted in each of these three areas are detailed. (KW)

ABSTRACT 30607
EC 03 0607 ED 044 848 Publ. Date Aug 70 41p.
Vorticelli, Patricia; Gentle, Augustine Type and Size of Educational Programs Attended by Hearing Impaired Students, United States: 1968-69.

Descriptors: exceptional child research; aurally handicapped; educational programs; national surveys; statistical data; school statistics; age groups; hearing loss; demography; residential schools; day schools; preschool programs

Data on 25,363 students enrolled in
special education programs (residential schools and day class programs) for the hearing impaired during the school year 1968-69 are presented. Data describe the types and size of programs attended, and the age, sex, and hearing threshold levels of the students. In addition to the detailed tables, data summaries and a discussion of the qualifications and limitations of the data are included. Appendixed are a description of The Annual Survey of Hearing Impaired Children and Youth, the data collection form used and instructions for its completion, and a listing by state of the programs participating in the survey. (KW)

ABSTRACT 30778
EC 03 0778 ED N.A.
Publ. Date Oct 70 9p.
Brill, Richard G.
The Superior IQ's of Deaf Children of Deaf Parents.
EDRS not available
Journal Of Rehabilitation Of The Deaf; V4 N2 F43-53 Oct 1970
Reprinted From The California PALMS, (December, 1969).
Descriptors: exceptional child research; aurally handicapped; intelligence quotient; intelligence differences; parent-child relationship; manual communication; oral communication; performance tests; measurement techniques; testing.
To determine if deaf children of deaf parents as a group would have a mean IQ on performance tests significantly greater than deaf children who did not have deaf parents, a study was made involving 65 children of deaf parents who had used some form of manual communication with their parents before entering school and 88 children of hearing parents who had never used signs. Intelligence test scores used included the Wechsler Adult Intelligence Scale (WAIS), the Wechsler Intelligence Scale for Children (WISC) and the Leiter Intelligence Scale. Results showed that the mean score for the children with deaf parents to be 113 and those with hearing parents, 104. It was concluded that a deaf child using manual communication from a very early age begins his cognitive growth and utilizes the various thinking processes before the child of the hearing parents. It is suggested that hearing parents should use manual communication with their deaf children during the preschool years. (GD)

ABSTRACT 30838
EC 03 0838 ED 044 069
Publ. Date (69) 23p.
Quigley, Stephen P.; Thomure, F. Eugene
Illinois University, Urbana, Institute For Research On Exceptional Children Illinois State Office Of The Superintendent Of Public Instruction, Springfield Division Of Special Education Services EDRS m,he
Descriptors: exceptional child research; aurally handicapped; performance factors; academic achievement; regular class placement; hard of hearing; identification; student evaluation.
To determine the effects of hearing impairment on school performance of students for whom no special educational provisions had been made, 116 students (ages 7 through 17 in public school grades 2 through 10) were evaluated for auditory impairment, IQ, and educational achievement. Findings of the study showed that even mild hearing impairment resulted in educational retardation. The study also indicated the need for early and improved screening for auditory handicaps, and the lack of educational provisions for the mildly impaired. (RD)

ABSTRACT 30851
EC 03 0851 ED N.A.
Publ. Date Dec 70 7p.
Craig, William N.; Collins, James L.
Communication Patterns in Classes for Deaf Students.
EDRS not available
Exceptional Children; V37 N4 P283-9 Dec 1970
Descriptors: exceptional child research; aurally handicapped; classroom communication; classroom observation techniques; interaction process analysis; student-teacher relationship; Flanders Category System.
In order to describe more objectively the classroom communication of deaf children, an instrument for making systematic observations of this communication was developed and tested. This technique, based on the Flanders category interaction analysis system, was adapted specifically for use with the deaf and included notations both for communication purposes and communication modes. When applied to 12 selected classes of deaf children (94 subjects) the instrument proved sensitive to differences in classroom interaction and provided a systematic record of these communicative exchanges between the teacher and student and among students within classes. (Author)

ABSTRACT 31027
EC 03 1027 ED 046 151
Publ. Date Jul 70 109p.
Pronovost, Wilbert And Others
Educational Evaluation and Programming for Children with Auditory Disorders.
Boston University, Massachusetts, School Of Education Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education EDRS m,he
Descriptors: exceptional child research; aurally handicapped; program evaluation; auditory training; evaluation methods.
The report is concerned with the activities of a 3 year pilot project of an educational evaluation and programming unit for children with auditory disorders. The educational evaluation process, the programs and problems of implementation, dissemination, other project activities and an evaluation of the project are discussed. Appendices cover such areas as staff, facilities and equipment, tabulations of data, children, and questionnaires for an evaluation of the project. (CD)

ABSTRACT 31061
EC 03 1061 ED N.A.
Publ. Date 14p.
Silver, Rawley A.
Art Breaks the Silence.
EDRS not available
Children's House; V4 N4 P10-3 Win 1970
Descriptors: exceptional child research; aurally handicapped; deaf; speech handicaps; aphasia; art; art education; abstract reasoning; art therapy.
To explore the opportunities in art for assessing and developing the abilities of deaf (and other special education) children, 25 students (ranging in age from 8 to 17 years) of deaf or aphasic, were placed in experimental art classes for approximately ten weeks. The drawings and paintings were evaluated by psychologists, psychiatrists, and special education teachers. General consensus (93%) was that evidence could be found that art had afforded opportunities to generalize, associate, evaluate, and express ideas and feelings. The author concluded that there was no reason why an individual who has impaired hearing or language should not have artistic talent, and that art experiences could serve to develop the capacity for abstract thought. (CD)

ABSTRACT 31163
EC 03 1163 ED N.A.
Publ. Date 120p.
Fisch, L., Ed.
Research in Deafness in Children.
EDRS not available
F. A. Davis Company, 1915 Arch Street, Philadelphia, Pennsylvania 19103 ($3.00).
Descriptors: exceptional child research; aurally handicapped; etiology; audiometry; auditory tests; genetics; incidence; infancy; conference reports.
Presented are the proceedings of a conference held at Oxford, England, April 6-7, 1963, organized by the Medical Research Committee of the National Deaf Children's Society. Part 1 contains research papers on causes of deafness, including papers on the classification of causes, genetics and congenital deafness, a study of causes of deafness in 2,355 children, incidence of known and unknown causes and verification, and the advantages, disadvantages, and procedures for conducting national surveys. The text of a discussion on research into causes of deafness, with editorial comment, is included. Part 2, concerning hearing tests in children, presents papers examining hearing tests as practiced at present, reactions to sounds during infancy, need for hearing tests for newborns, and problems in interpreting the
changes in response to auditory stimuli: -

follows. (KW)

The project studied auditory abilities of a selected group of advanced and retarded third-grade readers from high and low socioeconomic environments. Two general hypotheses were posed: advanced and retarded readers perform differently on auditory tasks; and socioeconomic environment affects auditory ability. A one-hour battery of auditory tests was administered to 39 third-grade children, all of whom were at least one year ahead or one year behind grade level in reading achievement. The research indicated that significant differences existed between advanced and retarded readers on the auditory tasks. Socioeconomic environment alone did not affect ability. The advanced readers from both levels performed similarly, and so did the retarded readers. Significant differences were more frequently found when the groups had more widely divergent mean IQ scores. (Author)

To compare the ability of day and residential school deaf children to articulate consonant phonemes, 22 students from the Utah State School for the Deaf (control group) were matched with 22 students from the day school extension division of that school (experimental group). An articulation test was administered and the total number of normal and intelligible responses compared using a chi square test and a t-test. Results showed that the null hypothesis, that significantly better articulation of consonant phonemes is not found in day school deaf students compared with residential school deaf students, could be rejected beyond the .01 level of confidence. It was concluded that the stimuli of the day school setting are more capable of eliciting a higher quality of speech. (KW)

The Cloze Procedure was used as the linguistic measuring instrument to study the effect of context on the deaf child's ability to make correct predictions in selectively mutilated written English at the fourth grade reading level. The experimental group included nine male and 15 female prelingually deaf residential school children (mean age about 16 years). The comparison group consisted of nine male and 15 female hearing students (mean age about 9 1/2 years). Three distinct levels of contextual contrast were generated from a single third grade reading passage. Results showed that as the amount of context became more constricive, the mean proportions of correct insertions became greater for all subjects. The students showed they could take advantage of the increased amount of contextual information afforded by the connected discourse level of constraint. Such experimentation may lead to the construction of a written language medium that is optimum with respect to its environmental structure and predictability. (Author/GD)
narratives, and discussion from both teachers and observers. Included are the evaluation results on the basis of which recommendations are made for program modifications related to the variables of interest, level of mastery, validity of sensitivity, relevance, and practicality. (KW)

ABSTRACT 31285
EC 03 1285 ED N.A. Publ. Date 66 236p.
Furth, Hans G.
Descriptors: exceptional child research; aurally handicapped; deaf; cognitive processes; thought processes; language development; psychological evaluation; historical reviews
The thinking-language relationship in the deaf is explored from the viewpoint of an empirical psychologist. The early chapters set the stage for the questions to which subsequent chapters address themselves. An historical perspective is taken; semantic clarifications of language competence, symbol, and thinking are made; the deaf and their language are examined; and contemporary psycholinguistics are outlined. The middle chapters relate a number of experimental observations on the thinking of hearing and deaf people. Implications from the empirical findings, dealing with the problem of thinking and language which will coordinate the findings, and also the state of affairs in the education of the deaf are presented. (CD)

ABSTRACT 31366
EC 03 1366 ED N.A. Publ. Date Feb 71 6p.
Chovan, William L.; McGettigan, James F.
The Effects of Vocal Mediating Responses on Visual Motor Tasks with Deaf and Hearing Children. EDRS not available * Exceptional Children; V37 N6 P435-40 Feb 1971
Descriptors: exceptional child research; aurally handicapped; mediation; memory; recall; perceptual motor coordination; aural stimuli; memory; recall (psychological)
The research investigated the effects of vocal labeling on short-term memory with two MA levels of deaf and hearing children. The purpose of the investigation was to determine the nature of the interaction among vocal labels, age levels, and a design arrangement task. It was found that 6 year old deaf and hearing children performed the same while 9 year old hearing children showed better recall than their deaf peers, with and without vocal labels. For the deaf, vocal labeling tended to have an interfering effect at the older levels, in part because of the competing stimuli in social auditory and visual-motor responses. (Author)

ABSTRACT 31375
EC 03 1375 ED N.A. Publ. Date 70 240p.
Rodd, Michael
The Hearing-Impaired School Learner. EDRS not available Charles C Thomas. Publisher, 301-327 East Lawrence Avenue, Springfield, Illinois 62703 ($8.50).
Descriptors: exceptional child research; aurally handicapped; statistical data; national surveys; graduate surveys; social adjustment; hearing loss; socioeconomic background; social class; psychological characteristics; intelligence level; vocational interests; social attitudes; personality development; foreign countries; Great Britain
Reported are the results of a descriptive study of a national sample of 230 hearing impaired school leavers in England during their last year in school. The purpose of the study was to assess the success of such students in the period prior to leaving school and to analyze their integration into society from an educational, psychological, and sociological point of view. The main variables used in the survey analysis were local authority areas, type of school, average pure tone hearing loss, speech reception level, age at onset of impairment, socioeconomic class, and sex. Data were gathered by three main techniques: audiometric examinations, psychological testing, and semi-structured interviews with the subjects, their parents, and their teachers. Psychological tests included tests of intelligence, occupational interest, and social adjustment. Data on friendship and leisure activities, preparation for work, social attitudes, and personality development are also discussed, and recommendations are made. Numerous tables and graphs showing data collected and results of chi-square and t-tests are appended. (KW)

ABSTRACT 31472
EC 03 1472 Ed 046 207 Publ. Date 70 131p.
Marshall, William J. A.; Quigley, Stephen P.
Descriptors: exceptional child research; aurally handicapped; academic achievement; communication skills; language ability; longitudinal studies; sex differences; reading ability; speech skills; lip-reading; mathematics; finger spelling
Communication skills, language abilities, and educational achievement of 163 subjects from six residential schools for deaf students were studied. Subjects were tested yearly from 1963 to 1967 on speech reading, finger spelling, speech intelligibility, reading achievement, arithmetic achievement, and written language. Both males and females and the combined group showed significant improvement in all areas except speech intelligibility, speechreading, and vocabulary usage. Females were consistently superior in receptive communication ability, reading achievement, and most language ability measures. No differences between the sexes were found any year in arithmetic ability, or in educational achievement in the last 2 years of the study. For both sexes, growth in educational achievement ranged from 1B grade per year in reading and language to 1B grade per year in arithmetic. In 1963, the average subject showed a battery median of four grades lower than the average non-deaf student. In 1967, battery medians were nearly 6 grades below the Stanford Achievement Test norms. (Author/KW)

Exceptional Child Bibliography Series
Abstract 31570
EC 03 1570 ED N.A.
Publ. Date Feb 71 15p.
Eachus, Todd
Modification of Sentence Writing by Deaf Children.
EDRS not available
American Annals Of The Deaf; VI 16 N 29-43 Feb 1971
Descriptors: exceptional child research; aurally handicapped; vocabulary; word recognition; vocabulary development; reading tests
To assess the reading vocabulary knowledge of deaf children, a vocabulary pool of 14,932 words was reduced to 7,300 words. These words were fed into a computer to produce 73 sets of 100 randomly selected words each. The 73 sets were converted into vocabulary tests which were randomly administered, two per child, to 13,207 deaf students, ages 7-17 years, in 89 schools for the deaf in the United States. Results indicated that girls, in general, seem to know more words than do boys, and that older children seem to know more words in common than do younger ones. The major portion of the report consists of a list of the 7,300 words, with definitions, and with the percentages of children in each of five age groups who know the word. A summary of words known by 67% of deaf children at the various age levels is also presented. Appended are statistical characteristics, such as time administered and mean scores, of the 73 test forms, and statistics on the frequency of occurrence and percentage of correct responses for each of the 7,300 words for the total group of subjects and for just the 7-year-old subjects. Appended information continues in Volume 2 of the report (see EC 03 575), which includes an alphabetical list of the test forms and instructions to teachers for test administration. (Author/KW)

Abstract 31575
EC 03 1575 ED 046 211
Publ. Date Aug 70 747p.
Silverman-Dresner, Toby; Guilfoyle, George R.
Lexington School For The Deaf, New York, New York
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS m,hc
OEG-0-8-000419-1792
BR-7-0419
Descriptors: exceptional child research; aurally handicapped; vocabulary; word recognition; vocabulary development; reading tests
The document is the second volume of a report providing descriptive data on the reading vocabulary of deaf children ages 8-17 years, which resulted from a study assessing the reading vocabulary knowledge of 13,207 deaf students. Volume 2, continuing the appendix begun in Volume 1, contains an alphabetical list of the 7,300 words used on the 73 forms of the vocabulary test, with their definitions and decays, for instructors who may wish to test children on particular words. Brief instructions for test administration are given. (KW)

Abstract 31574
EC 03 1574 ED 046 210
Publ. Date Aug 70 489p.
Silverman-Dresner, Toby; Guilfoyle, George R.
Lexington School For The Deaf, New York, New York
Office Of Education (DHEW), Washington, D. C., Bureau Of Research
EDRS m,hc
OEG-0-8-000419-1792
BR-7-0419
Descriptors: exceptional child research; aurally handicapped; vocabulary; word recognition; vocabulary development; reading tests
To assess the reading vocabulary knowledge of deaf children, a vocabulary pool of 14,932 words was reduced to 7,300 words. These words were fed into a computer to produce 73 sets of 100 randomly selected words each. The 73 sets were converted into vocabulary tests which were randomly administered, two per child, to 13,207 deaf students, ages 7-17 years, in 89 schools for the deaf in the United States. Results indicated that girls, in general, seem to know more words than do boys, and that older children seem to know more words in common than do younger ones. The major portion of the report consists of a list of the 7,300 words, with definitions, and with the percentages of children in each of five age groups who know the word. A summary of words known by 67% of deaf children at the various age levels is also presented. Appended are statistical characteristics, such as time administered and mean scores, of the 73 test forms, and statistics on the frequency of occurrence and percentage of correct responses for each of the 7,300 words for the total group of subjects and for just the 7-year-old subjects. Appended information continues in Volume 2 of the report (see EC 03 575), which includes an alphabetical list of the test forms and instructions to teachers for test administration. (Author/KW)

Abstract 31579
EC 03 1579 ED N.A.
Publ. Date Feb 71 3p.
Balow, Bruce And Others
Reading Comprehension Skills Among Hearing Impaired Adolescents.
EDRS not available
Descriptors: exceptional child research; aurally handicapped; reading comprehension; reading; reading skills; adolescents; time factors (learning); testing; New Developmental Reading Test; Metropolitan Reading Test
One hundred fifty-seven hearing impaired adolescents in Minnesota who attend residential schools or special day school programs for the hearing impaired were given two reading tests to determine their reading levels—the New Developmental Reading Test (NDRT) and the Metropolitan Reading Test (MRT). Comparisons made between scores of various age groups, ranging from age 13 to age 21, showed only limited improvement in the mean scores. Comparisons are made between scores obtained under standard time limits and under unlimited time conditions, and between literal reading comprehension skills and interpretive reading comprehension skills. The Literal Comprehension mean grade equivalent score was almost one grade higher than the Creative Comprehension mean—Even unlimited time did not raise the inferential-interpretive reading ability to the level of the reading for specific factual information. On the NDRT, timed and unlimited scores on Creative Comprehension tests show little difference, but extended time improved the Literal Comprehension scores. Scores of the small group of mildly hearing impaired students were one grade above the same test means of the total sample. Good agreement was found between the mean vocabulary scores on the NDRT and MRT, but a higher mean score for Creative Comprehension is shown on the NDRT. (Author/KW)

Abstract 31744
EC 03 1744 ED 046 475
Publ. Date 69 124p.
Vernon, McCoy
Multiply Handicapped Deaf Children: Medical, Educational, and Psychological Considerations.
EDRS not available
Council For Exceptional Children, 1411 South Jefferson Davis Highway, Suite 906, Arlington, Virginia 22202 ($5.25 HC, $3.75 PB)
Descriptors: exceptional child research; multiply; handicapped; aurally handicapped; etiology; incidence; psychological evaluation; educational diagnosis; medical evaluation; rubella; Rh factors; premature infants; heredity; meningitis
An extensive survey of the literature examines five major etiologies—prenatal rubella, prematurity birth, complications of Rh factor, meningitis, and genetics—in terms of their relevance to deafness and other disabilities. Following this survey, results of a study of 1,468 deaf children to determine causes of secondary handicaps in deaf children and to describe the nature of these handicaps are reported. Intensively studied were those deafened by maternal rubella (137), meningitis (137), prematurity (257), crythroblastosis fetalis caused by Rh factor complications (45), and heredity (79). Independent variables were these five etiologies. Dependent variables measured were intelligence, educational achievement, psychological adjustment, behavioral evidence of brain damage, communication skills, hearing loss, and physical anomalies. Data are analyzed for each of the dependent variables, and for prevalence of etiologies and of multiple handicaps. Findings for each of the five etiological groups are then presented. General conclusions were that much behavioral vari-
ance among deaf children is not due to their hearing loss, but can be ascribed to brain damage resulting from the same cause as the deafness. This variance was in areas critical to academic learning, psychological adjustment, and physical health. (KW)

ABSTRACT 31746
EC 03 1746 ED 046 477
Publ. Date 70 118p.
Lerman, Alan M.; Guilbeye, George R.
The Development of Pre-Vocational Behavior in Deaf Adolescents.
EDRS not available
Teachers College Press, Columbia University, 525 West 120th Street, New York, New York 10027 ($4.25).

Descriptors: exceptional child research; aurally handicapped; pre-vocational education; behavior patterns; deaf; adolescents; communication problems; language ability

To investigate the development of pre-vocational behavior in adolescents enrolled in schools for the deaf, and to determine the extent of the major variables related to the pre-vocational behavior of deaf adolescents, 240 students from four schools for the deaf were studied. Information required for the study was obtained in three ways: a personal data sheet, a parent questionnaire, and a series of testing and interviewing sessions with the subjects. Results were described indicating that at all ages deaf subjects had lower socio-economic levels than their hearing siblings and tend to cluster at the semiskilled and unskilled levels. It was concluded that the vocational information and planning of deaf subjects were related to their language and communication competence, the level of stimulation at home, and to a lesser degree their intelligence and independence. (CD)

ABSTRACT 31781
EC 03 1781 ED 048 677
Publ. Date Sep 70 137p.
Prisuta, Richard
A Follow-Up Study of Auditorially, Visually, and Orthopaedically Handicapped Pupils in Cincinnati.
Pennsylvania, Office of Research and Field Services
EDRS mf,hc

Descriptors: exceptional child research; vocational education; followup studies; handicapped; visually handicapped; physically 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 encountered to the extent that 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 31837
EC 03 1837 ED N.A.
Publ. Date Apr 71 5p.
Auxter, David
Learning Disabilities Among Deaf Populations.

EDRS not available

Descriptors: exceptional child research; aurally handicapped; learning disabilities; perceptual-motor coordination

The investigation attempted to identify perceptual-motor characteristics which might account for, or attribute to, the differences in academic learning ability in deaf populations of comparable CA and IQ. The exploratory study included an investigation of the following dimensions: sensory avenues of kinesthetic, and vision, tasks of hand-eye coordination, gross body coordination, motor speed and planning, physical and motor fitness, and the balancing mechanism. The findings of the study indicated that significant differences existed between the groups on tasks involving muscular strength, motor speech, and motor planning, and also on tasks which involved greater integration of neuromuscular control. No significant differences were found between groups on tasks involving the balancing mechanism or sensory utilization. Comments are made on the feasibility of programs to ameliorate reported deficiencies. (Author)

ABSTRACT 31960
EC 03 1960 ED 048 694
Publ. Date Jul 83p.
Blake, Gary D.
A Demonstration to Determine the Efficacy of Providing Rehabilitation Services to the Adult Deaf in an Ongoing Community Rehabilitation Facility for Handicapped Hearing Persons. Final Report.
Arkansas State Board of Vocational Education, Little Rock.
EDRS mf,hc

Descriptors: exceptional child research; aurally handicapped; vocational rehabilitation; program effectiveness; program evaluation; adults; multiply handicapped; underachievers; communication problems; vocational training centers; skill development; Arkansas

To determine the effectiveness, feasibility, and desirability of providing rehabilitation services to the adult deaf in a residential facility for handicapped hearing persons, 131 deaf clients were studied during 3 years. Forty were multiply handicapped while the majority were underachievers. The program was viewed as only desirable to a degree due to a lack of specialized staff and too little individual instruction in vocational skills. During the 3 years, 57 students completed training while 46 terminated before completion; 85% of the total were judged to have made worthwhile personal, social, and vocational gains, but most did not appear to benefit to the extent of their capabilities. Services for the deaf were considered feasible for the length of the study, but questions were raised concerning permanent continuation. The deaf were often short-changed as a result of communication difficulties. Additional data and conclusions are presented. (RJ)

ABSTRACT 32016
EC 03 2016 ED N.A.
Publ. Date May 70 18p.
Williams, Cyril E.
Some Psychiatric Observations on a Group of Maladjusted Deaf Children.

EDRS not available

Descriptors: exceptional child research; aurally handicapped; multiply disturbed; emotional problems; surveys; psychological characteristics; family influence

Information presented was obtained from a survey of 51 maladjusted deaf children, ages 5-14 years, who were psychiatrically assessed at the Larchmoor School in England for emotionally disturbed deaf children. Aspects of deafness (degree of hearing loss, etiology, time of diagnosis, etc.), intelligence, social class, causes of maladjustment, parental attitudes and experience, and educational attainments were investigated based on information obtained from social history forms, social adjustment scales, and reports of medical, audiometric, and psychological examinations. Psychiatric disorders found were similar to those encountered in normal children or those with other handicaps. Few children had intelligible speech and in most there was marked educational retardation. Early diagnosis of deafness was related to a lower incidence of speaking children than when diagnosis was made after the age of 2. Most subjects had severely disturbed home backgrounds, particularly those with anti-social disorders, but rarely was this the case with psychotic children. Few had neurotic disorders and the school was mainly used for children who disturb others. Six brief case studies are appended. (KW)

ABSTRACT 32289
EC 03 2289 ED N.A.
Publ. Date May 71 3p.
Harrison, Robert J.; Phillips, Betty Jane

Exceptional Child Bibliography Series
Observations on Hearing Levels of Preschool Cleft-Palate Children.

Journal of Speech and Hearing Disorders: V36 N2 P252-6 May 1971

Descriptors: exceptional child research; speech handicapped; cleft palate; hearing loss; auditory perception

Pure-tone audiometry was performed on a monthly basis to a small group of preschool-aged cleft palate children. The incidence of hearing loss in the group ranged from 2% to 71% from month to month. Further inspection of the data, however, indicates that all of the children experienced a significant hearing loss at some time during the study period. The lack of overt signs of hearing loss in the study group suggests that professional monitoring of the hearing levels may be necessary to assure optimum habilitation procedures. (Author)

ABSTRACT 32415

EC 03 2415 ED N.A.
Publ. Date Jun 71 3p.
Meadow, Kathryn P.; Schlesinger, Hilde

The Prevalence of Behavioral Problems in a Population of Deaf School Children.

EDRS not available

Descriptors: exceptional child research; deaf; behavior problems; residential schools; aurally handicapped; emotionally disturbed; state schools: mental health

A survey of behavioral problems was undertaken at a state residential school for the deaf. Teachers and counselors were asked to identify those students who were severely emotionally disturbed or exhibited behavior which demanded a disproportionate share of caretakers' time. Among the school population 12% were considered to be emotionally disturbed (five times greater than estimates for the general school population); another 20% were considered to be mildly disturbed (three times greater than expected). An informal census of administrators of day programs for the deaf indicated that proportions of students in both categories were approximately the same as those found in the residential school. It was concluded that the need for additional mental health services for deaf children far exceeds those which are available. (Author)

ABSTRACT 32420

EC 03 2420 ED N.A.
Publ. Date Jun 71 12p.
Greenberg, Bernard L.; Greenberg, Sally H.

The Measurement of College Potential in the Hearing Handicapped.

EDRS not available

Descriptors: exceptional child research; aurally handicapped; regular class placement; peer relationship; deaf; peer acceptance; vocational schools; employment potential

The purpose of the study was to examine both the hearing and deaf parent's views of class integration and the extent of the deaf person's job potentialities and the degree of social relationship. Three classes that had deaf and hearing students were tested. Hearing students in the experimental group were judged to have checked more occupations listed in the test than the hearing in the control group. The deaf in the control group were found to have checked more occupations than the deaf in the integrated classes (experimental group). In regard to the degree of social relationship, the experimental deaf group was noted as being close to the normal deaf group. Researchers concluded that classroom association seemed to be a factor in increasing a deaf person's view of his acceptance by a normal hearing population. A decrease of job potentialities was seen by those deaf students in integrated classes. One of the reasons speculated upon was that a deaf student's contact with normal hearing students may produce a more realistic and limiting view of the number of occupations a deaf person could perform. (CD)

ABSTRACT 33174

EC 03 3174 ED P54 554
Publ. Date Jun 71 42p.
Summary of Selected Characteristics of Hearing Impaired Students, United States: 1969-70.
Gallaudet College, Washington, D.C., Office of Demographic Studies EDRS MF.
Gallaudet College Book Store, Washington, D.C. 20002 ($1.00).

Descriptors: exceptional child research; aurally handicapped; educational programs; enrollment trends; incidence; national surveys; statistical data; demography

A survey of hearing impaired children and youth in the United States for the school year 1969-70 was conducted. One-dimensional summaries of selected characteristics for 32,285 students enrolled in participating special education programs for the hearing impaired were presented. Discussion of data highlights was followed by detailed tables that describe the following variables: number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by states; age; hearing threshold levels; age at onset of hearing loss; audiometric findings on hearing threshold levels; age; and sex. Seventy-nine schools and 63 special classes participated in the survey. The students for whom data are presented represent about one-half of the total number of hearing impaired students receiving special educational services. In addition to presenting detailed statistical tables, qualifications and limitations of the data are pointed out. (KW)

ABSTRACT 32820

EC 03 2820 ED N.A.
Publ. Date Apr 71 12p.
Carruth, Kathryn J. and Others
Possible Effects of Integration of the Deaf Within a Typical Vocational School Setting.

EDRS not available
Journal of Rehabilitation of the Deaf; V4 N4 P30-41 Apr 1971

Descriptors: exceptional child research; aurally handicapped; regular class placement; peer relationship; deaf; peer acceptance; vocational schools; employment potential

The purpose of the study was to examine both the hearing and deaf parent's views of class integration and the extent of the deaf person's job potentialities and the degree of social relationship. Three classes that had deaf and hearing students were tested. Hearing students in the experimental group were noted to have checked more occupations listed in the test than the hearing in the control group. The deaf in the control group were found to have checked more occupations than the deaf in the integrated classes (experimental group). In regard to the degree of social relationship, the experimental deaf group was noted as being close to the normal deaf group. Researchers concluded that classroom association seemed to be a factor in increasing a deaf person's view of his acceptance by a normal hearing population. A decrease of job potentialities was seen by those deaf students in integrated classes. One of the reasons speculated upon was that a deaf student's contact with normal hearing students may produce a more realistic and limiting view of the number of occupations a deaf person could perform. (CD)
pating special educational programs for the hearing impaired, the number and rate per 1,000 students of additional handicapping conditions and probable causes of hearing loss. Appendixed are a description of the annual survey, basic data and preschool data forms used, and a list of programs participating in the annual survey. (CB)

ABSTRACT

33236

EC 03 3236
ED N.A.
Publ. Date Oct 71
11p.
Owld. H. L.

Studies in Manual Communication with Hearing Impaired Children. EDRS not available
Volta Review; V73 N7 P428-38 Oct 1971

Descriptors: exceptional child research; aurally handicapped; manual communication; research design; research reviews (publications); fingerspelling; Rochester method

Reviewed and analyzed are three sets of studies dealing with manual communication and hearing impaired children. Focused upon are the research subjects and design and the significance of each study. Covered are: the study by Marshall S. Hester (1964) on the use of the Rochester method of communication (speech used together with single-handed fingerspelling) with very young students at the New Mexico School for the Deaf; the study by Stuckless and Birch (1966) on the influence of early manual communication upon linguistic development of deaf children, in which scholastic achievement of deaf children of deaf parents was found to be slightly better than that of deaf children of hearing parents; and the Stephen P. Quigley studies (1969) on manual communication, specifically the Rochester method. Pointed out are some common features of these studies and some considerations which cause the author to doubt whether manual communication does best prepare hearing impaired children for the hearing world, as the studies would imply. (KW)
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