# A Study on the Scholarly Communication for Speech Disorders

「언어장애」에 관한 학문적 의사전달과정 연구

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#### 抄 錄

이 연구의 목적은 학문의 세분된 한 주제분야, 즉 [언어장애]에 관한 학문적 의사 전달 과정을 서지적 측면에서 연구해 봄으로써 하나의 지표적 검색표본을 제공하고자 하는 것이다.

이 연구는 주제에 관해 기본적 지식이 있는 박사과정의 이용자를 대상으로 하였으며 주로 인쇄물형태의 자료외에 대표적인 모임과 이에 제출된 종류의 자료도 포함하였다.

#### **ABSTRACTS**

The purpose of this paper is to provide a guide to scholarly communication in a specific field of science, which is 'Speech Disorders.

The paper was directed at a sophisticated reader who has some familiarity with research on the topic. Although the paper was emphasized written communication, it also included examples of less structured environments such as typical meetings and types of papers presented to colleagues.

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## 1. Introduction

Speech disorders are kinds of human diseases in nervous system as well as disorders of the ear and hearing. Speech may be said to be disordered and so to present a problem for the speaker, or his listeners, or both, when listeners pay uneasy attention to the manner of speech, have difficulty making it out, or are distracted from what is said by the way in which it is said.

A comprehensive evaluation of knowledge and research in speech and hearing, published in 1969 by a section of the U.S. Public Health Service, under the title "Human Communication and its disorders; an overview" revealed 5% or roughly 2,500,000 of school age children in U.S. have speech disorders. This statistics also indicates further that speech impairment is the commonest handcapped in U.S. schoolage children; of the 105 out of every 1,000 that are handicapped in someway; 35 have speech disorders, 23 are mentally retarded, 20 are emotionally disturbed, 10 are physically disabled, etc.

Although no data in similar detail are available from other countries, from experience in Germany, Austria and other Central European countries, some trends could be said. The incidence of cleft palate in very high among American Indians, while it is much lower among Negroes than in Caucasians. Stuttering is more frequent in northern countries, such as in Scandinavia, than it is in southern regions e. g. Italy. Clinical work with speech disorders is fostered also in Great Britain, Continental European country including U.S.S.R., Japan, Korea, South American etc.

There is promising evidence that as teachers, physicians, and parent learn more about stuttering, new modes of treatment of stuttering in its early stages, stressing counseling of parents and teacher, are increasingly effective. For exemple, in the beginning of stuttering, when the child's hesitations and repetitions appear to his parents to be a problem before they do to the child.

## 2. A Subfield of Science

Disorders of speech are commonly classified as follow;

- 1. disorders of voice
- 2. disorders of articulation
- 3. stuttering(stammering)

- 4. Aphasia (Dysphasia)
- 5. retarded development of speech or language
- 6. speech disorders associated with hearing loss or deafness

For any therapy of speech disorder, diagnosis involves;

- (1) detailed description of what the speaker does that makes his speech clin ically significant
- (2) identification of the time, places, listeners, and types of speaking in relation to which he does or doesn't do these things
- (3) determinination of whether physiological or psychological factors are fostering the disorder.

Basic aspects of therapy include;

- (1) identifying the persons other than the speaker who are most concerned in the problem, counseling them, and enlisting their supporting
- (2) making use of family, school, and community resources
- (3) counseling the speaker as his age and maturity warrant
- (4) speech retaining by individual or group methods that enable the speaker to hear, see, and feel what he does that interferes with speech.

## 3. Terminology

It is very important to select proper terminology to find useful sources in the subject field. In this respects, *L.C. SUBJECT HEADING LISTS* might be the first choice.

The following five subject headings can be found as proper headings through L.C. Subject Heading Lists.

- 1. Communication Disorders
- 2. Speech, Disorders of
- 3. Communicative Disorders in Children
- 4. Speech Disorders in Children
- 5. Speech Therapy

Another important guide to the selection of terminology in the medical and health science is *MEDICAL AND RELATED SCIENCES THESAURUS* (U.S. Dept. of Health and Human Services, 1980). It is the list of indexing terms developed and maintained as integral component of CRISP(Computer Retrieval of Information on Scientific Projects), supported by the Public Health Services. It

prepared terms; Information - Communication Disorders, Information - Communication Disorders, Agnosia, Information - Communication, Speech - disorders.

#### 4. Associations

As in any science fields, maintaining contact with other professionals in same field is a primary way of keeping informed of recent development. In this sense, it is very important to join a professional associations and to contact with research centers to keep informed of recent developments.

There are 15 professional associations exclusively for speech pathologists in the United States. Two representative societies in U.S. are AMERICAN SPEECH LANGUAGE HEADING ASSOCIATION(ASHA), NATIONAL ASSOCIATION FOR HEARING AND SPEECH ACTION(NAHSA).

ASHA, founded in 1925, has 35,000 members and has several publications. ASHA publishes four important journals; ASHA MONTHLY JOURNAL, JOUR-NAL OF SPEECH HEARING DISORDERS, JOURNAL OF SPEECH AND HEARING RESEARCH, LANGUAGE, SPEECH AND HEARING SERVICES IN SCHOOLS. One of the most important publication (most cited journal in this subject) is THE JOURNAL OF SPEECH AND HEARING DISORDERS (ASHA 1936) -, vol. 1). This journal pertains to the nature and treatment of disordered speech, hearing, and language and to the clinical and supervisory processes by which this treatment is provided. JOURNAL OF SPEECH AND HEARING RESEARCH (ASHA, 1958-, vol. 1) is a quarterly journal which pertains studies of the processes and disorders of speech, hearing and language. It also published index and abstract; cummulative index three of the journals of the ASHA 1972 – 81, cummulative index of the journals of the ASHA, Dsh Abstract, Guides to A - V materials on Speech and Hearing Disorders. Besides, there are a couple of publications by ASHA. They are Language, Speech, and Hearing Services in School which pertains to speech, hearing and language services for children in schools. ASHA Reports(irregular) which publishes the proceedings of conferences on speech, hearing, language or related topics, and ASHA (monthly) which contains professional and administrative activities of speech language pathology, and the association. ASHA has its annual convention in November. The proceedings of this conventions are published in ASHA Reports published irregularly.

The other important association for the subject field is NATIONAL ASSOCIATION FOR HEARING AND SPEECH ACTION(NAHSA) founded in 1919. NAHSA has 1400 members and some publications. NAHSA News is published bi-monthly by NAHSA including professional and administrative activities of association. NAHSA also publishes directory of sites around the country which are equipped with assistive devices for the hearing impaired and pamphlets on a wide range of communicative disorders and development of speech, language and hearing in children.

#### 5. Research Center

RESEARCH CENTER DIRECTORY, 1984—1985 (Gale Research Co. 9th ed. 1984) is a guide to approximately 7,500 universities related and other non-profit research organization. The directory has three indexes, alphabetical index of research center, acronyms index of research centers and subject index. 70 research centers dealing with the subject names through the subject index. Each entry includes information on the name, address, governing research activities and field, the date of foundation. As a sample research, David T. Siegal Institute for Communicative Disorders can be found under the subject "Communicative disorders" through the subject index. The institute publishes quarterly journal, titled Siegel Report. The Center holds professional meeting and seminars irregularly.

It is very important to keep aware of what research projects are doing and done in the subject field. In this respects, RESEARCH IN BRITISH UNIVERSITIES POLYTECHNICS AND COLLEGES (The British, Library Board, 1983. 3volumes) is the most comprehensive guide to the research projects being carried out in Great Britain. The purpose of RBUPC is to keep researchers aware of activities in a wide range of subject fields and to inform research works in other countries of the projects currently under way in Great Britain. Arranged by 55 broad subjects, with each broad group instructions and departments are listed numberically. The book has two separate indexes. The name index and keyword index to the subjects of the projects, built from key terms supplied by the contributors themselves. There are many research projects being carried out in Great Britain. "Cause classification and outcome of speech disorders in young children" by Robinson R.J. and Baird G. dr. and Smith R.L. is one of them.

### 6. Guide to the Literature

The best way to find appropriate sources in the subject is to begin with guide to the literature, namely CHEN'S SCIENTIFIC AND TECHNICAL INFORMATION SOURCES(MIT Press, 1977). This guide is comprehensive guide to the literature of science and technology. Each section covers a different type of sources and is subdivided by subject. Under the subject term 'Medical Science' this book prepared MEDICAL AND HEALTH INFORMATION DIRECTORY(Gale Research Co., 2nd ed.). It is a guide to associations, government agencies, U.S. and foreign medical school, hospitals, Grants - award Sources, journals, newspapers, review journals etc. It has 36 sections and each section has its own index by the alphabetical names.

HEALTH SCIENCE BOOKS, 1876—1982 (R.R.Bowker Co., N.Y., 1982, 4vols) is the most comprehensive guide to enter medical literature printed in book form in the U.S. Each entry contains L.C. Cataloging information. Arranged first by subject according to L.C. Subject Headings and then under the subject each entry arranged alphabetically by author's last name. It has three access points by subject, author and title.

#### 7. Journals

The primary journal in the subject field is JOURNAL OF SPEECH AND HEARING DISORDERS (ASHA, 1936—, vol. 1—, quarterly). This journal pertains to the native and treatment of disordered speech, hearing and language and to the clinical and supervisory process by which this treatment is provided. A major criterion to publish and article is the clinical significance of the subject matter. It has author index and title index separately at the end of each volume. Each issue publishes 12—15 articles quarterly. It published "A pilot study of language for bilingual, language handicapped children; Theoretical and intervention implication" by Joseph A. Perozzi.

BRITISH JOURNAL OF DISORDERS OF COMMUNICATION (The College of Speech Thera - piests, 1966—, vol. 1—, 3/Year) included originals articles dealing with clinical investigation, therapy and social aspects of disorders of communication through the receptive and expressive processes of language. Each issue has 10—15 artticles, book review section for new books in the subject field and

cummulative index appears at the end of each volume. It published 'Speech waveform perturbain analysis': A perceptible acoustical comparison of seceral measures by Andres G Askenfelt and Britta Hanmarbeg in March 1986, vol. 29, no. 1. THE JOURNAL OF COMMUNICATIONS DISORDER (Elseivier NorthHolland Inc. 1967—. vol. 1—) publishes original articles on problems related to the various disorders of communication broadly defined. It includes experimental reports, ears studies, theoretical papers, book reviews. It has only one author index at the end of volume. Usually this journal publishes 4-5 big articles. One of the articles in January 1986 is 'The study of childhood language disorders; 19 century perspectives' by Paul S. Weiner. In This article, he presented the concept of H. Gutzmann who became the first professor of speech pathology at the University of Berlin Medical School around 1900. THE JOURNAL OF SPEECH AND HEARING RESEARCH is published quarterly by ASHA. This journal includes articles about studies of the processes and disorders of speech hearing and language. Contributed manuscripts may take the form of experimental reports theoretical, tutorial or review paper. Brief research note, it has separate indexes; author, subject and title index. It doesn't have book review section.

### 8. Indexes and Abstracts

There is an excellent guide to the abstracts and indexes, titles ABSTRACTS AND INDEXES IN SCIENCE AND TECHNOLOGY: a descriptive guide (2nd ed. Dolores B. Owen, 1985). This book is the most comprehensive guide to abstracts and indexes in the field of science and technology. It is arranged by subject and within the subjects the titles are arranged alphabetically.

DSH ABSTRACTS(Deafness, Speech and Hearing Publication, Inc. 1960—) is quarterly abstract journal including articles on hearing and speech and related disorders. International in scope, each issue contains an author index which cumulates annually and an annual subject index is the final issue. It included 250 journals from 38 foreign countries including from major AHSA journals. It prepares the English abstracts from foreign language articles. For exemple, it abstracted "Attention parameters of stutterers" by Russian author KALIAGIN V.A. in Jan. 1985. Every issue it abstracts over 1,000 articles.

Child Development Abstracts and Bibliography published the Society for Research in Child Development, Inc. 3/Years publishes abstracts from professional periodicals and review books related to the growth and development of children. International coverage in scope, each volume contains subject and author index. This abstract journal is divided into two parts; "Abstracts of articles" and "Book Notice". The first part, Abstracts of articles, includes abstracts from professional periodicals and the second part contains a full bibliographic citation and book review.

EXCEPTIONAL CHILD EDUCATION RESOURCES (The Council for Exceptional Children) is a quarterly journal of non evaluative abstracts which are stored in the database of the CEC Information Services Unit which stands for Council for Exceptional Children. The coverages of subjects are biology, health, medicine, social psychological and personality studies, education processes, theory and methology. It is largely divided into two parts; abstaracts which includes abstracts for dissertations as well as books and journals and indexes, author title and subjects index.

#### 9. On - Line

There are some online databases that offer online access to bibliographic reference services in field for medical sciences. ONLINE BIBLIOGRAPHIC DATABASES(3rd ed. Aslib, 1983) is a good guide to the English language online databases. MEDLINE(MEDLARS Online) is printed version of INDEX TO DENTAL LITERATURE, AND INTERNATIONAL NURSING INDEX. Supplied by National Library of Medicine, this subject field is medicine and wide range of related sub-fields. The other one is EXCEPTIONAL CHILD EDUCATION ABSTRACTS which includes subject, education of handicapped and gifted children. Dialog(file 54) and BRS(file ECER) supplies online service. In dialog file 54, search with the term, speech and pathology/de introduced 'Clinical supervision in Speech language pathology and audiology' by Mansour S.L.from ASHA, Feb. 1985.

#### 10. Current Awareness

Current awareness is essential to keep aware of recent development in the subject field. ASHA(ASHA 1959—, vol. 1—) is published monthly pertaining to the professional and administrative activities of Speech language pathology,

audiology and the association. Asha serves as a "House Organ".

CURRENT CONTENTS; LIFE SCIENCES(Institute for Scientific Information, Inc. 1958—, vol. 1—) is an access tool to the tables of contents of the world's most important 1,160 journals. It has two indexes; Title word index and author index. Title word index helps a user to quickly locate articles on a given topic.

#### A. DISSERTATION INDEX

Dissertation abstracts international (University Microfilm International, Ann Arbor, MI) is accessed by first searching COMPREHENSIVE DISSERTATION INDEX (University Microfilm International Ann Arbor, MI). CDI is arranged alphabetically by keyword in context. Keywords appear in alphabetical order within each subject and under each keyword, all dissertations having that word in their titles are listed. In same searching, "A study of the Comparability of Master's level training and Certification requirements and needs of Speech Language Pathologists" by Lynda Ruth in Capbell University.

#### **B. PROCEEDINGS**

PROCEEDINGS IN PRINT(Proceedings in Print, Inc.) is published bimonthly with annual cummulation. PIP is an index to conference proceedings in all subject area. Balthazor, R and Cevette M. presented "Computer proceeding of clinical experiences in speech pathology and audiology". It is a conference paper of annual convention of American Speech Language Hearing Association in 1979.

C. 8MM FILMS IN MEDICINE AND HEALTH SCIENCES(3rd ed. Benschoter, R.A., Univ. of Nevraska Medical Center, 1977) includes 3,850 8mm - film titles in the field of medicine and health science. Under the Subject heading 'Speech Disorders', there are 8 films produced by Bureau of Education for the handicapped. One of them is 'ASHA omnibus survey 1984'.

# 11. Government Documents

Government publication is another important sources. A good guide for the sources is *U.S. GOVERNMENT SCIENTIFIC AND TECHNICAL PERIODICALS* by Yannarella and Aluri. It contains four journals from government documents. One of them is monthly journal from Johns Hopkins Medical Institutions, Information Center for Hearing Speech and Disorders of Human Communication, ti-

tled CURRENT CITATIONS ON COMMUNICATION DISORDER(CCCD): Language, Speech and Voice, 1976ed. It is a current awarness service resulting from recently collected material stored in the information center's database and relevant citations from the monthly services of the MEDK.LAS tape. LC numbers are given. Other three journals also are published from that Information Center. They should blend speech retaining is concerned chiefly with the defective sounds. If the speaker is a child still learning to speak and making the errors common for his age, he may not need no speech instruction. The clinician works instead with the parents, teachers, the children's speech.

A DICTIONARY OF SPEECH PATHOLOGY AND THERAPY/Samuel D. Robbins. [1963]

HANDBOOK OF SPEECH PATHOLOGY Lee Travis. N.Y. Appleton - Century - Crafts in 3 vol. It introduced last 50 years laboratory and the practices of the clinic under 33 titles for specific area. For example the titles are 'The development of Speech', 'The neurophysiology of speech', 'Speech sound foundation'.

SPEECH CORRECTION; PRINCIPLES AND METHODS/Charles Van Riper 5th ed. 1972. It explained the field of speech pathology and each kinds of disorders. One of them is CCCD: HEARING BALANCE, CCCD: HUMAN COMMUNICATION, BIBLIO - PROFILE ON HUMAN COMMUNICATIONS AND ITS DISORDERS. A biblio - profile is a capsule state of the art report followed by a bibliography from U.S. dept. Health, Education and Welfare. One of the publication is "Surgical treatment of deafness". It included 579 references from 1968 to 1971. In this volume, it introduced "On the history of conservative radical operations on the ear" by Jansen E.

MONTHLY CATALOG OF THE U.S. GOVERNMENT PUBLICATION (U.S. Government Printing Office, 1895—, vo. 1—) is a good guide to the government publication. It has five indexes; title, author, series/report number, stock number and contact number. Subjects are listed according to LC Subject Heading Lists. A search can be done under the subject heading list given in the first part of the paper. Representative title through 1985 is 'Communicative disorders among patients in Virginia medical facilities' by Donald Stockford.

#### 12. Classics

HEALTH SCIENCE BOOKS (1876-1982) contains 20 monographs, 4 diction-

aries, handbooks, 7 bibliographies under the subject term 'Speech, disorders of'. And other good source is the bibliography of *ENCYCLOPEDIA OF BRITANNIC-A*, 1985. Under the subject term, it prepared 14 bibliographies. The following works are duplicated.

- 1. Speech Language problems: and overview/edited by Morris Val Jones.
- 2. Speech handicapped School Children/Wendell Johnson. Rev. 5ed.

In this book, Practically all articulation errors of children are omission of speech sounds. (as in pay for play) A speaker may misarticulate one or more sounds or chapter is 'Mouth of a child who suffered a severe Lyn-Burn'.

## 13. Conclusion

This process to literature research for speech disorders provides an overview of the most basic library tools in this area.

Also the material in this work is arranged to correspond to the order of procedures in which a person would undertake a literature search. The contents are both a guide to doing a literature search and a reference to listings of basic sources and databases.

Especially for a novice in science and technology, it could be useful to identify a subfield of science where a specific problem is investigated by an identifiable group of researchers. In the view of guiding for the user, this paper tried to give all the steps of search strategy with examples.

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