

### ***Does Speech and Language Therapy Work? A Review of the Literature (1995)***

by Pam Enderby and Joyce Emerson

Publisher: Singular Publishing Group

Available from: Login Brothers, 1-800-665-1148, <http://www.lb.com>

Cost: \$50.75

Reviewer: Ann Meltzer, The Rehabilitation Centre, Ottawa, Ontario

This book is a critical analysis of significant published international research on speech and language treatment methods and related studies of efficacy. The book is divided into eight chapters, each reviewing efficacy studies on the management of a specific disorder: cleft palate, dysarthria, aphasia, laryngectomy, learning disabilities, stuttering, voice disorders, and speech and language disorders in children.

The information is consistently well organised and clearly presented. Each chapter can be read as a self-contained review of the specific topic. For each disorder there is a brief review of studies on epidemiology, methods of classification and assessment, different therapy approaches, and an extensive and rigorous analysis of related efficacy research. Each chapter has an excellent concluding summary and reference list.

One objective of the authors was to identify priority areas for research relating to the effectiveness of speech and language therapy. They have achieved this goal in each area and identified common priority areas across different client groups. In conclusion, Enderby and Emerson report that evidence of efficacy in the treatment methods of speech and language disorders is often inconclusive because the efficacy studies themselves have poorly defined measurement objectives. Interventions by speech-language pathologists are often addressing the impairment, the disability, and the handicap at the same time. When this book went to press there had been no published efficacy studies which separated out the components of therapy to establish whether the evaluation of the effectiveness of treatment was on the impairment, the disability, or the handicap. Therefore the efficacy research itself has failed before the studies on treatment effectiveness even started.

This finding is increasingly relevant at a time when speech-language pathologists have to develop quantitative and qualitative outcome measures and determine the most effective and efficient way of managing speech and language disorders. The book provides excellent direction and should be a priority for inclusion in the personal library of all speech-language pathology practitioners, students, and researchers studying the treatment of communication disorders.

### ***Foundations of Aphasia Rehabilitation (1993)***

Edited by Michel Paradis

Publisher: Pergamon Press

Available from: Elsevier, 1-888-4ES-INFO

Cost: \$133.50 (US)

Reviewer: Chantal Pelletier, The Rehabilitation Centre, Ottawa, Ontario

This 451-page book is a collection of papers that were presented at the 1992 Congress of the International Association of Logopedics and Phoniatrics (IALP) in Hannover, Germany. "The purpose of this book is to provide students of language rehabilitation and professional language pathologists with an overview of the theoretical foundations of their field of endeavour, i.e., with the rationale behind what speech therapists have been doing over the past decades" (p. ix).

It is a well-planned volume, organised into five sections covering classification and assessment of rehabilitation methods, their linguistic, cognitive and neurological foundations, and the foundations of aphasia rehabilitation with special populations. The editor has written useful introductions to each section, helping to pull together the information presented in each part. One unfortunate flaw is the presence of typographical errors in a few of the chapters.

The first chapter, by Methé, Hubert, and Paradis is on inventory and classification. As an appendix, summaries of 42 studies are grouped according to the rehabilitation approach used (i.e., stimulation, behaviourist, right-hemisphere stimulation, non-verbal communication, pharmacology). In chapter 2, Wertz addresses the question, "Are various methods of therapy efficacious for various types of aphasic patients?". He makes a case for the use of both single-subject, alternating treatment design studies to test specific treatments with specific types of aphasic patients and well-controlled group designs to be carried out in multicentre treatment trials. Springer and Willmes report on two studies, each comparing two treatment methods (linguistically structured vs. stimulation and traditional PACE vs. modified PACE) within aphasic patients in the following chapter. The two studies are presented as examples of sound research design.

The fourth chapter, by Wilks and Paradis, describes treatment programmes based on units of language (phonetics and phonology, morphology, syntax, semantics) and those based on restoring communicative competence (discourse). It includes an appendix summarising 60 studies and articles published since 1970 in a wide variety of international journals. Meth, Obler, and Walsh (Chapter 5) examine the linguistic assumptions upon which the *Minnesota Test for Differential Diagnosis of Aphasia (MTDDA)* and the *Boston Diagnostic Aphasia Examination (BDAE)* are based. In chapter 6, Perkins and Lesser discuss the role of pragmatics in aphasia rehabilitation. They encourage the use of conversational analysis as a way of identifying the source of breakdowns in communication to determine the focus of aphasia therapy.

Lesser reviews the application of psycholinguistic modelling to the practice of aphasia treatment in the United Kingdom (Chapter 7). She encourages clinicians to be "practitioner-researchers": therapists who use research methodology in their work with each patient in order to select appropriate treatment strategies. Kremin provides an in-depth



look at naming facilitation strategies and therapeutic approaches for word-retrieval in Chapter 8. Cognitive therapies of reading and writing disorders are discussed in Chapter 9. Kremin takes us through treatment studies targeting populations with dyslexia or dysgraphia. In Chapter 10, Byng and Lesser review 19 studies on sentence-level therapy, grouped according to whether the treatment is "symptom-focused" or "processing-focused". They show that the question of why different therapies are (or are not) efficient cannot be answered at present.

Chapter 11, by Kertesz, reviews the mechanisms of neurobiological recovery from cerebral injury and summarises recent localisation studies. He reminds us that the factors of size and location of lesions, initial severity of aphasia, time from onset, and etiology must be controlled when examining the effect of therapy. In chapter 12, Vendrell, Vendrell, and Ibanez present their research on interhemispheric involvement in aphasic patients' reading abilities. They examine reaction time to visually presented stimuli in either hemifield and performance on picture and/or word-matching tasks.

Paradis discusses bilingual aphasia rehabilitation in Chapter 13 and identifies several questions that should serve as the basis for research in this, as yet, largely unexplored field. Paradis also provides a review of literature on therapy with bilingual aphasic subjects. Bushell, Obler, and Kerman-Lerner describe a pilot study on the benefits for speech/language therapy on aphasic patients having a history of heroin or alcohol abuse in the final chapter.

In my opinion, this volume would be a most useful addition to the library of all speech-language pathologists working with aphasic patients in either a research or a clinical capacity. It also should be made available to students. The book contains a wealth of information and references. Two of its appendices provide summaries of the extremely varied treatment methods that have been developed thus far. Even if the efficacy of these methods with specific types of aphasia is as yet unproven, having this information at one's fingertips can only be of assistance. Finally, the book argues strongly for better research on aphasia rehabilitation and offers many suggestions, to researchers and clinicians alike, for accomplishing this objective.

## ***Neuropsychology of Stuttering (1991)***

Edited by Einer Boberg

Publisher: University of Alberta Press, 1-800-668-0821,

<http://www.quasar.ualberta.ca/press/>

Cost: \$39.95

Reviewer: Sheila Stager, National Institutes of Health, Bethesda, Maryland, USA

**T**his book presents a collection of papers from the Third Banff International Conference on Stuttering held in 1989. The proceedings from the two previous Banff Conferences on Stuttering, held in 1979 and 1984, have also been published.

Ever since Orton and Travis (1929) suggested that stuttering may result from a lack of synchrony of cortical activity arising from bilateral rather than unilateral speech and/or language representation in the brain, researchers have been applying the latest technologies for measuring brain function to explore this hypothesis. Although the stated topic for this conference was stuttering and abnormal brain function, these papers really focus more specifically on the laterality of function and hemispheric asymmetry in persons who stutter, and the ramifications of these findings. The intended audience for this book includes scientists, clinicians, and students who are interested in sharing "the enthusiasm, excitement, and conflict that exist on this frontier of stuttering research" (p. xvi).

The book is organised into seven chapters, one written by each of the speakers at the conference. The book begins with a paper by Mateer examining the issue of the development of cerebral asymmetries, and the cerebral organisation for speech and language which provides a framework for later interpretation of experimental data. The second paper, by Moore, summarises the results from a variety of techniques that have been used to study differences in hemispheric processing, including dichotic listening, tachistoscopic viewing, cortical blood flow, evoked potentials, and hemispheric alpha asymmetries. The third paper presents a working model of interhemispheric interference mechanisms that might underlie stuttering. Support for this model comes from a series of studies completed by the author, Webster, comparing motor control in non-speech modalities between persons who stutter and those who do not. The fourth paper is a descriptive study that examines the functional integrity of cortical, midbrain, and brainstem systems in a group of 17 persons who stutter. Cortical functional integrity was assessed using a neuropsychological battery, with some tests presumed to be sensitive to right frontal lobe function, some to left frontal lobe function, and some to interhemispheric influences. Auditory evoked potentials were used to determine integrity of midbrain/brainstem function. For the fifth and sixth papers, two researchers, Curlee and Ingham, were asked to present their views on the implications of this line of research to the diagnosis and treatment of stuttering. The final paper presents Perkins' "conceptual theory of neural functions that might underlie the cognitive, linguistic, and behavioural characteristics of stuttering" (p. xv).

As in previous proceedings, after each chapter there are edited transcriptions of the discussion periods that followed the papers. These add further information for readers, and give them more of a flavour of the conference, as well as identifying some of the more controversial issues. The discussions following the papers which dealt with the implications of neuropsychological research on diagnosis and treatment were particularly thought provoking. A nice addition to this book is the epilogue, which provides a forum for the discussion leaders from the conference to comment both on the papers and the discussions that ensued.

This book does not provide the clinician with new therapy techniques to implement, and because of its relatively narrow focus, it is probably not suitable as a textbook. However, the chapters are clear and well written, so clinicians and students who are interested in brain function and stuttering should find this book a good resource. The



impact of this book will be for researchers, as the authors of the papers have certainly raised thought provoking issues and testable hypotheses. This book should also be a good reference for those who are attempting to understand the results from some of the newer brain imaging techniques.

#### Reference

Orton, S. T., & Travis, L. E. (1929). Studies in stuttering: IV. Studies of action currents in stutterers. *Archives of Neurology and Psychiatry*, 21, 61-68.

### **Signs and Strategies for Educating Students with Brain Injuries: A Practical Guide for Teachers and Schools (1995)**

by Gary Wolcott, Marilyn Lash, and Sue Pearson  
Publisher: HDI Publishers, 1-800-321-7037  
Cost: \$24.95 (US)

Reviewer: Christy Faraher Amidon, Delta School District, Delta, British Columbia

**W**ritten for educators, this is a straightforward, easy to read, and informative book for developing a basic understanding of the cognitive, behavioural/social, and sensorimotor effects of traumatic brain injury (TBI).

Bringing together their backgrounds in counselling, training, social work, programme development, and special education, the authors cover the basic principles well for an introductory guide for educators, speech-language pathologists, therapists, and parents. Increasing numbers of children and youth are sustaining seemingly mild head injuries. Their quick physical and medical recovery, combined with the educational practice of placement in the least restrictive/most enabling environment, has resulted in more classroom teachers encountering students with the cognitive, social/behavioural, and sensorimotor sequelae of TBI. As the authors state, "inappropriate expectations for these students can lead to behaviour problems and disruption for the entire classroom" (p. 39).

Educators will appreciate that this exceptionally useful, easy reference guide is often written in point form. It offers practical information and realistic suggestions. The fact that, even with the most appropriate and functional recommendations and interventions, sometimes minor difficulties remain is emphasized. Brief information on brain anatomy and physiology comes later in this guide and, thus, seems less overwhelming to the reader with no medical training.

The authors present information which helps educators better understand the differences between medical and educational institutions and how they respond to and support a child with TBI and their families. Awareness of these differences should serve to help educators know what medical and rehabilitation specialists do, and what they don't do. This begins to bridge the communication and information gap that often exists between these two realms of service provider.

In Chapter 1, the authors take a problem-solving approach by using a question and short answer format to dispel many of the common

myths and misunderstandings surrounding traumatic brain injury. Chapter 2 clearly delineates changes educators and families need to watch for in children following TBI, regardless of how mild the physical/medical injury may have been. Chapter 3 outlines strategies for responding to student change in the classroom. Quick reference points on the left hand side of each page highlight the information in the paragraph on the right side. Chapter 4 helps demystify the role of the neuropsychologist in the rehabilitation of individuals with TBI and suggests questions and concerns appropriate for the teacher to raise. In Chapter 5, the perspective of the parent and family of the child with TBI, is informative and serves to sensitise the educator to the often far-reaching effects TBI has on a child and his/her community. Because "the vast majority of children who have traumatic brain injuries have no pre-existing conditions ... their parents are inexperienced with the special needs system and may consider it a program primarily for children with birth disorders or mental retardation" (p. 64). The parents thus need a great deal of guidance and support dealing with the learning and behaviour problems that often result from even mild TBI.

Transition-planning worksheets are included to assist the student, parents, and educators with transition from hospital to school and beyond. The re-entry worksheet begins with concise social and academic history information and ends with program modifications and adaptations required for successful re-entry to school. The middle section of the worksheet looks at student strengths and needs/barriers in the domains of cognitions/communication, social/behaviour, and sensorimotor skills. Subsequent worksheets address the transition planning for moving to the next grade and moving between classes in secondary school. The worksheets are well thought out and provide a solid format for adaptation for specific students and educational centres.

The text ends with a brief but helpful listing of sources for additional reading and resources for educators and parents. Throughout the text there were helpful suggestions for a planned partnership between families and schools. The emphasis on planning is strong, as a proactive measure for best success in school re-entry as opposed to simply sending the student back to school and hoping for the best. In a situation where there had been no specific pre-planning for school re-entry following a mild traumatic brain injury, the information on planned partnerships and the transition-planning worksheets would serve as a solid base for planning ahead when academic or behavioural difficulties have been encountered.

This guide is recommended for all school resource libraries. Educators need to be aware of the ramifications of TBI and plan accordingly for school success. The easy-to-read format, accompanied by clear case examples, also makes the guide approachable for parents who are trying to navigate the educational system with a child with special needs following TBI.

