

Materials Review / Évaluation de ressource

'Ready for R' Kit (2000) Marian MacDougall

Illustrator

Silvana Bevilacqua

Publisher

Ravenhollow Press Inc.,
Vancouver, BC

Cost

\$29.95

Reviewer

Lisa Archibald, MHSc
School of Communication
Sciences and Disorders
University of Western Ontario
London, Ontario

The 'Ready for R' Kit contains 24 full-colour 3 X 5 inch laminated cards, a simple step-by-step instruction manual, and black and white reinforcement charts, all in a 11 X 7½ inch, durable, plastic, zip lock envelope. The primary aim of the 'Ready for R' Kit is to help speech-language pathologists work with parents to correct the production of /r/ in 6- to 12-year-olds.

The manual consists of general information about sound development, an introduction to the program, general suggestions for working on sounds with children and /r/ in particular, and a description of the steps in the program. The steps described include isolation, auditory discrimination, word level r-initial, word level /r/ in blends, word level postvocalic /r/, sentences, and conversation.

The 32-page manual is well-organized and easily accessible. The use of bullets, point form, text boxes, bolding, and italics makes the information easy to find at a glance. The information is easy to understand and free of jargon. The general

suggestions cover such tips as the need for daily practice, not to expect overnight success, not to move to the next level too quickly, warming-up, being positive, and how to deal with frustration. These tips are covered in two introductory pages, but repeated again as "hints" in text boxes throughout the manual.

The manual is directed at the parent, and herein lays a clinical concern. At the beginning of the manual, the author states "The sound is the most difficult to teach and produce," and I wholeheartedly concur. Many the day I spent leaning over a child, peering in his/her mouth, coaching placement and wondering myself if that /r/ was a little better than the last one, or a little worse! If it is difficult for a trained speech-language pathologist to discriminate /r/ productions at times, then it will be difficult for a parent. In addition, the /r/ sound does not always follow the predicted pattern of difficulty. For example, sometimes a child could produce /r/ in blends before /r/ initial, or only /ar/ postvocalic words. Specific modifications to a stepwise, traditional /r/ articulation program is often necessary. I often delayed home practice until I was certain of the consistency of the sound production. In most cases, a parent should follow a /r/ program at home under the careful direction of a speech-language pathologist.

The author does state in the manual that the parent should seek professional help; however, the reference could be more prominent and more active. The first suggestion to seek professional help occurs on page 9, and then page 12, and this is to tell parents that if they are not making progress, they should seek

professional help. I would rather see a recommendation that the program be used under the guidance of a speech-language pathologist, appearing first and foremost in the general suggestions.

The colourful picture cards included in the set are some of the most engaging pictures I have seen. They are bright, clear, and filled with activity. Any child would be interested in looking at and talking about them. They are fairly busy for targeting the word level, but are filled with funny features that would stimulate sentences and conversation. When I shared them with my son, several target words were elicited spontaneously and many more after a minimal prompt (e.g., "And the girl has on a ...?").

When you list words with /r/ in initial position, in blends, or postvocally, there are many, many of them. As a result, there are many target words listed on the back of the cards and in the manual. The target words span a number of word classes (i.e., nouns, verbs, adjectives) and a range of familiarity (e.g., chair, spur). It is possible to use the cards not only for /r/ work but for language and vocabulary work as well.

Overall, the 'Read for R' Kit is versatile, portable, attractive, and best of all affordable! For just \$30 Cdn, one gets the whole kit. The kit would be useful to speech-language pathologists working with school-aged children, and it would be a welcome addition to all of those /r/ drill sheets we all know and....!



Book Reviews / Évaluation des ressources écrits

**Acoustic Immittance
Measures in Clinical
Audiology: A Primer (1997)
Terry L. Wiley & Cynthia G.
Fowler**

Publisher:

Singular Publishing Group Inc.
San Diego, CA

Cost:

\$78.95

Available from:

www.demarhealthcare.com or
www.amazon.ca

Reviewer:

Greg A. Noel, MSc
Nova Scotia Hearing & Speech
Centres and School of Human
Communication Disorders
Dalhousie University
Halifax, Nova Scotia

Acoustic Immittance Measures in Clinical Audiology: A Primer is a comprehensive review of basic information on the acoustic immittance battery and related issues. The goal of this book is to provide readers with essentials of acoustic immittance. The author's state quite tersely it is not meant to be a comprehensive review but rather "...to provide readers with the fundamentals that are necessary and important for more advanced study on the topic," careful to avoid lengthy discussions and select a grassroots approach in teaching this vast, and often complex, area.

The textbook covers a variety of topics relevant to the novice and the experienced clinician. Each chapter is well organized and easily read. The book is composed of eight chapters with fair use of illustrations, and two appendices. Most chapters include discussion items and suggested exercises for self-study which, when

completed, are two strategies that direct the reader in reviewing the literature, to establish the critical concepts, and assist the reader in retention of the facts.

The first chapter provides the reader with a broad overview of clinical measures, differentiating between immittance, impedance, and admittance. It is here that Wiley and Fowler set the stage for the rest of the book, providing brief definitions of the vital terms tympanometry and stapedial reflex and the expected outcomes in various pathologic conditions.

In Chapter 2, Principles of Measurement, a discussion in the matter of acoustic immittance necessitates detailed formulas and the like, but the author duo manages a superb job of keeping the math to a minimum. The explanations are by necessity detailed, but they are presented in such a style that lends itself perfectly for walking the reader through the complex information. The comprehensive mathematical examples solidify the written work. Working through one example provided, with accompanying notes, it is possible to calculate peak compensated static acoustic admittance and impedance utilizing data from a tympanogram in both rectangular and polar forms. By completing this example, the clinician becomes more in tune with the measures and how they relate to each other, and more importantly, the basic audiological test battery.

Chapter 3 covers the basics of calibration of acoustic immittance instruments. This chapter highlights the basic concepts of why calibration is needed and offers readers a "cook-book" of rudimentary directions for the probe unit, immittance, air pressure, and acoustic reflex systems. To supplement the text, this chapter

would benefit from: a) detailed pictures/graphs of the various systems and those at various stages of calibration, b) sample calibration forms for the novice reader or sole charge clinician, and c) more complete instructions on "how to" calibrate equipment.

Chapter 4 addresses tympanometry and compensated static measures. The familiar topics of vector and multi-frequency tympanometry are covered in this chapter. Each topic is reviewed with common pathologies and the reader is piloted through the expected outcomes. This chapter ends with a section highlighting the relationship between the audiogram and the tympanogram.

Chapter 5 discusses eustachian tube function. Wiley and Fowler do a great job of giving relevant practical clinical knowledge to an area that, in this clinician's opinion, is all but forgotten in today's clinical setting. Procedures covered include the customary measures of inflation-deflation, Toynbee, and Valsalva. Also included is the "sniff test". This is new to the reviewer and quite simply is a procedure to determine if sniffing induces significant negative pressure to the middle ear. The authors provide mean, standard error, and confidence intervals obtained for Valsalva, Toynbee and inflation-deflation procedures from 24 adults with normal tympanograms and end the chapter by providing suggestions for further research.

The stapedial reflex measurement is discussed in Chapter 6, the largest chapter in the text. This topic can often be a source of stress for newcomers, but Wiley and Fowler provide a great mechanism for learning. Beginning with the anatomy and physiology section, the authors outline a detailed and well-scripted

explanation of the normal acoustic reflex arc and its neuronal organization. The next section covers clinical applications of the acoustic reflex thresholds and decay and offers practical guidelines for utilizing acoustic reflexes to estimate hearing thresholds. The final section, supplemented with many illustrations and case examples, enables the reader to literally walk through the host of typical disorders affecting the acoustic reflex, including middle ear, facial nerve, cochlear, eighth nerve, and brainstem disorders.

Chapter 7 covers screening applications, and outlines the use of the immittance battery as tools for screening. While the authors dedicate this chapter to preschool and school age children, there is a small segment on newborn hearing screening. The literature review includes several detailed paragraphs on the use of otoacoustic emissions (OAE's) and the auditory brainstem response (ABR). This section, however, omits any discussion covering auditory neuropathy and the critical role that the immittance battery plays in its differential diagnosis. Information on this challenging disorder deserves space in any introductory text. By educating the clinician to the latest category of hearing loss at the preparatory level can only solidify the chances that the condition will be correctly identified when encountered. Ultimately, such education may reduce the number of false positives and minimize the detrimental effects that accompany a misdiagnosis.

In the final chapter entitled "Conclusion," a one-page summary, Wiley and Fowler reiterate their goal for the book, provide a concise historical review of immittance measures, and finally offer insights for future endeavors. One promising area in this field is that of wideband reflectance. Here the authors miss an opportunity to provide the reader with an introduction to this exciting area of research. Simply stated,

reflectance is a ratio between the energy striking the surface of the tympanic membrane to that which is reflected. While the reflectance research is promising and still in its infancy, the authors would be most qualified to detail this concept for the novice reader.

Appendix A is a glossary of selected terms from ANSI, 1987, *Specifications for instruments to measure aural acoustic impedance and admittance (aural acoustic immittance)*. While this is an added touch, the authors have already done a fabulous job in defining most of the 21 definitions throughout their text. It could certainly be dropped from the book and would not be missed.

To complete this work, the authors have chosen a logical supplement for Appendix B - the complete 1991 American Speech-Language-Hearing Association (ASHA) bibliography on acoustic immittance measures. This means that the owner has a complete reference text, not only including masterfully scripted text, but a comprehensive reference of immittance measures in the same volume. However, for those clinicians already possessing a copy of the ASHA document, which converts into 101 pages of this 250-page text, it may make this a less appealing purchase.

This book does meet its intended goal - to provide the foundations of the acoustic immittance battery on which students and clinicians alike can build. I agree with David Lilly, who scripted the forward for this text. "Their final result reflects not only their grasp of the material but also their ability to teach it" (p VIII). The text would be a welcomed asset to students and clinicians alike. It would serve as a good supplement to those who require a refresher course in acoustic immittance. From an instructional perspective, this book provides a comprehensive review of the basics on this vast and often complex area, in relevant and logical manner. It would be helpful to supplement this book with various

case studies, including pure tone air and bone audiograms, speech audiometry, immittance results and reflexes. This would help solidify how immittance measures are crucial in the basic audiological profile and strengthen the cross-check principle, a principle the authors mention several times through the course of the book. The majority of chapters offer the reader items for self-study, and suggested exercises - if completed, will provide focus and repetition to the novice, ensuring the reader's learning of the basics in acoustic immittance. Overall, this text would be an excellent acquisition for the novice, a useful reference for practising clinicians, and an easy text to incorporate at the introductory graduate level.

**Cochlear Implant
Rehabilitation in Children
and Adults (1996)
Dianne J. Allum**

Publisher:

Whurr Publishers Ltd., London,
England

Cost:

\$88.50

Available from:

www.whurr.co.uk or
www.amazon.ca

Reviewer:

Kim Zimmerman, MSc
Cochlear Implant Audiologist
London Health Sciences Centre -
University Campus
London, Ontario

The book *Cochlear Implant Rehabilitation in Children and Adults* consists of twenty chapters and offers a comprehensive overview of international rehabilitation methods as they pertain to cochlear implantation. Reviews of rehabilitation practices, and outcomes related to such practices, from seventeen cochlear implant clinics worldwide are provided as part of

this book. This book acts as a resource that allows various rehabilitation techniques to be presented in a language common to all and for use both within and across countries. Allum strives to provide broad based rehabilitation methods, as well as more specific training techniques, that allow care providers to work competently with their patients in achieving maximum performance from their cochlear implant systems. The book begins by providing an overview of cochlear implant systems, the benefit they may provide, and their cost-effectiveness. This overview is then followed by systematically outlining rehabilitation management for cochlear implant recipients from the seventeen clinics. A list of clinics is provided as part of the book.

The basic overview of implant technology is a wonderful way to begin this book. It allows for a solid understanding of the equipment available for use, speech processing strategies, and the psychophysical characteristics associated with cochlear implants. It should be noted, however, that recent advancements in technology are absent given the book's date of publication. In addition, further understanding of the implant equipment may have been facilitated by the use of diagrams of the internal and external components of the system(s). A summary of the factors that influence the effectiveness of cochlear implants is provided, and the implication of speech processor parameters on rehabilitation is adequately discussed. For individuals who are new to cochlear implants the presentation of such information affords an opportunity to familiarize oneself with some of the implant equipment available, as well as with the terminology necessary to participate effectively in the rehabilitation of cochlear implant recipients.

The onus often falls on healthcare providers to demonstrate that the service they offer is both valuable and

cost effective. This book does well to address these issues. It adequately discusses the need for collecting outcome measures using more than one type of reporting procedure, and outlines the use of speech perception testing, observation, questionnaire completion, and parent report, as tools to monitor progress and report outcomes. In addition, the author's discussion of cost utility related to both adults and children was well received as the differences that must be considered between these populations when assessing the cost-utility of a service are often overlooked.

The remaining chapters of the book are devoted to selected clinics and their provision of rehabilitation services following cochlear implantation. Each clinic affords a detailed account of their rehabilitation program including information on counselling, post cochlear implant expectations, rehabilitation techniques, educational support, speech and language training, and parent/patient education. Although there is a fair amount of information overlap between the chapters included within the book, it is not a bad idea as such overlap may reinforce certain concepts, especially as they apply to developing a more solid understanding of the rehabilitation practices required for a successful outcome with a cochlear implant. The effective use of an assistive device such as a cochlear implant depends, at least in part, on the individual using the device and on the rehabilitation they receive. The requirements for rehabilitation, however, differ significantly for the various age groups of recipients. This book adequately provided rehabilitation ideas for a wide population base, from those in infancy through to adulthood.

A significant amount of information was provided in each chapter of the book. As such, it was beneficial to have summary flowcharts

to refer to as quick reference guides to a clinic's assessment and/or treatment protocol. The heterogeneity of the cochlear implant recipient pool makes it next to impossible to provide a rehabilitation program that would apply to all implant users. Clinicians will, however, discover a large number of rehabilitation activities and exercises dispersed throughout this book. The task bestowed to the clinician then involves meshing the ideas presented in this book into a well structured rehabilitation program for the patients treated at particular facilities. The inclusion of appendices to familiarize the reader with various concepts, test materials, and questionnaires, as well as reference lists to allow for further research of a specific topic area, would certainly facilitate this process.

The information presented in *Cochlear Implant Rehabilitation in Children and Adults* by Dianne J. Allum follows a nice progression. The author has provided a substantial compilation of materials on aural rehabilitation as it pertains to cochlear implants, as well as a sufficient overview of cochlear implant equipment, speech processor characteristics, and programming parameters. She has succeeded in producing a resource of rehabilitation techniques that can be used by the international community of those serving the cochlear implant population. Given the presentation style and complexity of some of the information provided in this book, it is best suited to individuals who currently provide aural rehabilitation services for implant recipients, or to those interested in establishing a rehabilitation program for an implant clinic. If you fall into the above categories, and are looking for a wealth of ideas regarding the provision of therapy for adults and children, this is a book you may want to consider as an addition to your resources.

