REMEDIATION OF COMMUNICATION DISORDERS SERIES

HEARING-HANDICAPPED ADULTS



Thomas G. Giolas



University of Connecticut

HANDICAPPED ADULTS

Prentice-Hall, Inc., Englewood Cliffs, New Jersey 07632

Library of Congress Cataloging in Publication Data

GIOLAS, THOMAS G.

Hearing-handicapped adults.

(Remediation of communication disorders) Bibliography: p.

Includes index.

1. Hearing impaired. 2. Hearing impaired— Rehabilitation. I. Title. II. Series. HV2380.G56 362.4'2 81-13897 ISBN 0-13-384693-8 AACR2

©1982 by Prentice-Hall, Inc., Englewood Cliffs, N.J. 07632

All rights reserved. No part of this book may be reproduced in any form or by any means without permission in writing from the publisher.

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

Editorial/production supervision by Virginia Cavanagh Neri Interior design by Maureen Olsen Cover design by Maureen Olsen Manufacturing buyer: Edmund W. Leone

A-EP-LAPAE-E-I-U NAST

Prentice-Hall International, Inc., London
Prentice-Hall of Australia Pty. Limited, Sydney
Prentice-Hall of Canada, Ltd., Toronto
Prentice-Hall of India Private Limited, New Delhi
Prentice-Hall of Japan, Inc., Tokyo
Prentice-Hall of Southeast Asia Pte. Ltd., Singapore
Whitehall Books Limited, Wellington, New Zealand

HEARING-HANDICAPPED ADULTS

REMEDIATION OF COMMUNICATION DISORDERS SERIES

Frederick N. Martin, Series Editor

STUTTERING	
	Edward G. Conture
HEARING IMPAIRMENTS IN YOUNG CHILDREN	
	Arthur Boothroyd
HARD OF HEARING CHILDREN IN REGULAR SC	HOOLS
Mark Ro	oss with Diane Brackett — and Antonia Maxon
HEARING-HANDICAPPED ADULTS	
	Thomas G. Giolas
ACQUIRED NEUROGENIC DISORDERS	
	Inomas P. Marquarat
LANGUAGE DISORDERS IN PRESCHOOL CHILD	REN
	Patricia R. Cole
LANGUAGE DISORDERS IN SCHOOL AGE CHILI	DREN
	Mary Lovey Wood
Forthcoming	
ARTICULATION DISORDERS	
,	Ronald K. Sommers
CEREBRAL PALSY	
	Iames C. Hardy

Without the Encouragement, Patience, Love, and Substantive Content Contributions From My Wife, This Book Could Never Have Been Written. I Dedicate This Book to Marilyn.



With the information explosion of recent years there has been a proliferation of knowledge in the areas of scientific and social inquiry. The speciality of communicative disorders has been no exception. While two decades ago a single textbook or "handbook" might have sufficed to provide the aspiring or practicing clinician with enlightenment on an array of communication handicaps, this is no longer possible—hence the decision to prepare a series of single-author texts.

As the title implies, the emphasis of this series, *Remediation of Communication Disorders*, is on therapy and treatment. The authors of each book were asked to provide information relative to anatomical and physiological aspects of each disorder, as well as pathology, etiology and diagnosis to the extent that an understanding of these factors bears on management procedures. In such relatively short books this was quite a challenge: to offer guidance without writing a "cookbook"; to be selective without being parochial; to offer theory without losing sight of practice. To this challenge the series' authors have risen magnificently.

The handicapping effects of hearing impairment have always been a primary professional interest of Thomas Giolas. The majority of his research efforts have centered around the assessment and prediction of the effects that loss of hearing have upon everyday life situations. What evolved was the certainty that implications for aural rehabilitation are more meaningful if the assessment of handicap is carefully carried out. In this book, Dr. Giolas ties together, in one volume, his clinical and research experience with the Hearing Performance Inventory, which he and his colleagues developed. Teachers and clinicians following the tenets of this book, rather than drill-like forms of therapy will likely find that their adult hearing-impaired patients are better served.

Frederick N. Martin Series Editor



This book is concerned with the handicapping effect of hearing impairment and aural rehabilitation. It attempts to acquaint the reader with what it means to have a hearing impairment of sufficient severity to interfere with functional communication. The focus is on persons who have acquired a hearing impairment in adulthood and the unique communication and adjustment problems which may develop. A systematic differentiation is made between hearing impairment and hearing handicap. Hearing impairment is used as a generic term referring to any organic hearing problem regardless of etiology or degree. Hearing handicap is used to refer to the ways the hearing impairment has affected a person's everyday life situation. The overall goal of this book is to encourage audiology to move beyond the evaluation of hearing impairment and concentrate as much, if not more, on the assessment and management of hearing handicap. Accordingly, this book concentrates on the rehabilitative activities designed to assist hearing-impaired persons achieve their optimal potential in communication. Auditory and nonauditory procedures for assessing hearing handicap are discussed in detail. A Comprehensive Aural Rehabilitation Program is developed, followed by a sample eight-week program for working with a group of hearinghandicapped adults and their families. Specific modifications of these programs are suggested for persons with hearing impairments which are age-related, unilateral, or of sudden onset.

It is hoped that this book will serve as a stimulus to interest the reader in the rehabilitative needs of the adventitiously hearing-handicapped adult.

This book represents the strong influence of at least four colleagues who entered my life early in my career and remain close friends. Those who have read the works of Louise M. Ward, Elizabeth J. Webster, and Edwin W. Martin will recognize the source of the basic philosophy of client respect that underlies the approach presented in this book. For their contribution to my early professional and personal life I would like to take this opportunity to thank them. I would also like to acknowledge my teacher and friend, Aubrey Epstein. His unwavering faith and support provided me with the confidence to accept the academic challenge he gives to all his students.

Special thanks are extended to Lucy Tilton and Paul Simison for their help in typing and preparing the manuscript for publication.

And finally, gratitude goes to Panayota Noufrios for her early and continued love and support.



Foreword xi

Preface xiii



INTRODUCTION 1

DEFINITION OF TERMS 3
TARGET POPULATION 4
THIS BOOK'S MISSION 5
PREREQUISITE INFORMATION 6
SUMMARY 6



What it means to have a hearing impairment 7

PERSONAL ADJUSTMENT PATTERNS 8

COMMUNICATION PROBLEMS 12 intensity of the signal 12 speech discrimination 14 environmental conditions 20

HISTORY OF THE HEARING IMPAIRMENT 28 SUMMARY 30



Assessment of hearing handicap: audiometric procedures 31

THRESHOLD MEASURES 33
pure tone thresholds 33
speech reception threshold (SRT) 39

viii Contents

SUPRATHRESHOLD MEASURES 41 speech discrimination testing 41 social adequacy index 45 SPECIAL AUDIOMETRIC PROCEDURES 47 SUMMARY 48



Assessment of hearing handicap: self-report procedures

THE SELF-REPORT APPROACH 51 hearing handicap scale 53 hearing measurement scale 53 denver scale of communication function 57 profile questionnaires for rating communicative performance 58 section summary 58 hearing performance inventory 58 SUMMARY 76



Aural rehabilitation: an orientation

A COMPREHENSIVE AURAL REHABILITATION PROGRAM 80 PUBLIC INFORMATION AND AUDIOMETRIC SCREENING 80 **EVALUATION 82**

AURAL REHABILITATION GROUPS 84

DEVELOPING A PLAN 83

group leader 87 session structure 88 group members 89 group activities 90 optimal use of auditory cues 92 communication strategies 95 individual sessions 103

SUMMARY 105



Aural rehabilitation groups: a sample program 106

GROUP MEMBERS AND STRUCTURE 107

INITIAL INTERVIEW 108

Contents ix

A SAMPLE EIGHT-WEEK REHABILITATION GROUP PROGRAM 108 SUMMARY 115



Special populations

UNILATERAL HEARING IMPAIRMENT 118
problem areas 120
actions taken 121
feeling responses 121
clinical implications 122

SUDDEN HEARING IMPAIRMENT 122
adjustment pattern 123
remediation 123
speech conservation 125

AGE-RELATED HEARING IMPAIRMENT 127
visual perception 131
public information and audiometric screening 134
evaluation 136
remediation 137
SUMMARY 139

Appendix 141

A GUIDE FOR THE EVALUATION OF HEARING HANDICAP 143 impairment, handicap, and disability 143 historical background information 147

references 151

B A REPORT OF THE AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION TASK FORCE ON THE DEFINITION OF HEARING HANDICAP 153

introduction 153
factors contributing to hearing handicap 154
hearing handicap and compensation 155
an alternate method for predicting hearing handicap
157
summary 162
references 162

- C HEARING HANDICAP SCALE 165 form A 165 form B 166
- D THE DENVER SCALE OF COMMUNICATION FUNCTION 167

此为试读,需要完整PDF请访问: www.ertongbook.com

X Contents

E OBSERVATIONS FROM HEARING PERFORMANCE INVENTORY, EXPERIMENTAL FORM | 171

- F HEARING PERFORMANCE INVENTORY, FORM II 173 instructions 173 occupational items 182 sections 185 categories and subcategories 185
- **G** HEARING PERFORMANCE INVENTORY, REVISED FORM 189 instructions 189 occupational items 194 sections 195 categories and subcategories 197
- ${f H}$ The denver scale of communication function for senior citizens living in retirement centers 200

References 205

Index 213



- O DEFINITION OF TERMS
- O TARGET POPULATION
- O THIS BOOK'S MISSION
- O PREREQUISITE INFORMATION
- O SUMMARY

Introduction



Hearing plays an important and unique role in a person's developmental process. Initially in the early stages of life, infants respond to the world primarily in terms of how they feel physiologically and in terms of what is done to them physically in the course of their care. Hearing, through the infant's gross response to environmental sounds, serves to connect the infant with the physical environment beyond the confines of his or her own body. Shortly thereafter, the infant begins to respond more selectively and differentially to these environmental sounds, and this response lays the groundwork for the development of verbal communication skills. Verbal communication skills not only facilitate a smoother emotional, educational, and social growth process, but comprise the main component of the skills necessary for coping with the adult world. Shostrom (1967) believes that communication is the greatest problem two human beings face. Fleming (1972) describes communication as containing two basic elements: sending a message and receiving a message. People spend a great deal of their adult lives (1) attempting to make others understand what they are saving (sending a message) and (2) trying to understand (receive) what is being said to them.

The normal development of verbal communication skills depends to a great extent upon the ear's ability to receive and process acoustic energy, especially that which comprises the speech spectrum. Consequently, problems with the normal acquisition of language, speech, education, and vocational skills arise when hearing is impaired. For persons who have acquired hearing problems after they have reached adulthood, difficulties become acute in the areas of social interaction and performance in the employment setting, and often considerable strain is placed on interpersonal relationships.

The nature and severity of these problems depend on a number of factors. Hearing impairment can take one direction or a combination of several directions, each contributing to separate and overlapping problems. The severity of the resulting problems depends on (1) the amount of auditory deprivation (hearing loss), (2) the location along the auditory pathway where the damage lies (site of lesion), and (3) the person's age when the damage occurred (onset of impairment). Later, such factors as (1) the person's acceptance of the hearing impairment, (2) promptness in seeking professional assistance, (3) family support, and (4) the person's general approach to problem solving become extremely important in determining

the adjustment pattern of a person who has acquired a hearing impairment in adulthood. Knowledge of these factors and how they interact is necessary in order to better understand the hearing-handicapped person.

DEFINITION OF TERMS

A number of terms are used to describe or refer to persons who are experiencing hearing difficulty. These terms are often used interchangeably and may carry a rather general meaning. However, that is not the case in this book. Throughout this book a number of terms, such as *hearing impairment, hearing loss*, and *hearing handicap*, will be used in a very specific way and will mean something quite different from one another. For example, to many people the sentence "Does the hearing impairment have a sufficiently severe hearing loss to result in a hearing handicap?" would seem somewhat forced at best and confusing at worst. However, in this book each of these terms (and many others to be discussed as they appear in subsequent chapters) have very specific definitions.

Hearing impairment is used here as a generic term referring to any organic hearing problem regardless of etiology or degree. We will also use this term within the context of the Davis and Silverman (1978) definition: "a deviation or change for the worse in either structure or function, usually outside the range of normal." In other words, hearing impairment emerges as the term to be used when reference is being made to the condition of abnormal hearing and no additional information regarding the impairment is indicated.

Hearing loss is used whenever specific reference is being made to a hearing impairment which is of a particular intensity magnitude, such as a 40dB hearing loss. At times hearing level will be used interchangeably with hearing loss.

Finally, hearing handicap will refer to the effect of the hearing impairment on the person's everyday situation. More specifically, we will faithfully follow the Davis and Silverman (1978) definition of this term: "the disadvantages imposed by an impairment sufficient to affect one's personal efficiency in the activities of daily living."

Employing these definitions, the previously introduced sentence, "Does the hearing impairment have a sufficiently severe hearing loss to result in a hearing handicap?" may be translated to mean "Does the hearing problem (hearing impairment) of unspecified nature have a sufficient acoustic energy loss (hearing loss) to cause interference in everyday listening tasks (hearing handicap)?"

Such close adherence to the specific use of these terms will go a long way in orienting the reader to the basic mission of this book: that is, to create an interest in the assessment of hearing handicap in adults and its treatment.

O TARGET POPULATION

There are approximately 20 million children and adults in the United States who have hearing loss (Chalfant and Scheffelin 1969). In this society, one of the natural consequences of aging is the gradual reduction of hearing sensitivity. Figures 1–1 and 1–2 show the overall trend with age for men and women. With the prospect of an ever-increasing number of adults with appreciable hearing impairment, it is essential for professionals to look at the diagnostic and rehabilitative needs of this group.

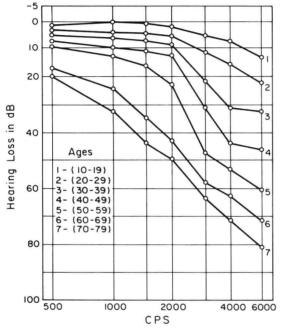


FIGURE 1–1 Median hearing losses of men in the total sample of the Wisconsin State Fair Survey. Data are referenced to ASA, 1951, audiometric zero, left ear only (A. Glorig et al., "1954 Wisconsin State Fair Hearing Survey," Monograph, American Academy of Otolaryngology—Head and Neck Surgery, 1957. Reprinted by permission.)

This book concentrates on the following target population:

- 1. Persons who have acquired a hearing impairment as adults.
- Persons whose hearing impairment has resulted in partial or total loss of hearing, with gradual or sudden onset.
- Persons whose hearing impairment has manifested itself in a hearing handicap.
- 4. Persons with either unilateral or bilateral hearing impairment.

Issues pertaining to congenitally deaf adults and children will be referred to as they facilitate the discussion of the adventitiously hearing-impaired adult.

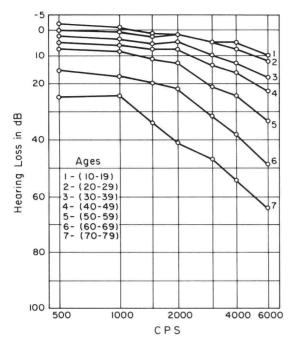


FIGURE 1–2 Median hearing losses for women in the total sample of the Wisconsin State Fair Survey. Data are referenced to ASA, 1951, audiometric zero. (From Glorig et al., 1957. Reproduced by permission.)

O THIS BOOK'S MISSION

There is considerable interest on the part of professionals in the hearing-impaired child and in the diagnosis of hearing impairment in general. And rightly so. However, there is a greatly reduced interest in the rehabilitation of hearing-impaired adults who acquired their impairment as adults. These people are in dire need of rehabilitative procedures designed to asist them in coping with their medically irreversible hearing impairment. It is this group on which this book is focused. Chapters One and Two present the reader with basic and practical information about the handicapping effects of hearing impairment. These effects are discussed in terms of how the resulting communication problems affect the emotional, social, and occupational dimensions of the lives of persons with hearing impairments. It is concluded that rehabilitative programs designed to help persons cope with their hearing impairments are not only desirable but essential if these people are to continue living productive lives. Chapters Three and Four deal with the assessment of hearing handicap. Chapter Three describes the advantages and disadvantages of audiometric procedures as indicators of communication problems resulting from hearing impairment. Audiologists are encouraged to expand their view of these procedures and to incorporate them into their rehabilitative activities. Chapter Four reviews self-report procedures for assessing hearing handicap and develops a rationale for their use in overcoming some of the inadequacies of psychophysical measures.