

*J. Miller*



# The Clinical Assessment of Language Comprehension

---



# The Clinical Assessment of Language Comprehension

---

by

**Jon F. Miller, Ph.D.**

Professor and Chair  
Department of Communicative Disorders  
Waisman Center on Mental Retardation and  
Human Development  
University of Wisconsin–Madison

and

**Rhea Paul, Ph.D.**

Professor  
Speech and Hearing Sciences  
and  
Director  
Portland Language Development Project  
Portland State University  
Oregon

· P A U L · H ·  
**BROOKES**  
PUBLISHING CO

Baltimore • London • Toronto • Sydney

**Paul H. Brookes Publishing Co.**  
Post Office Box 10624  
Baltimore, Maryland 21285-0624  
www.brookespublishing.com

Copyright © 1995 by Paul H. Brookes Publishing Co., Inc.  
All rights reserved.

Typeset by Signature Typesetting & Design, Baltimore, Maryland.  
Manufactured in the United States of America by  
Sheridan Books, Inc., Fredericksburg, Virginia.

Second printing, April 2000.

Permission to adapt the following materials is gratefully acknowledged:

Pages 146–147, Procedure 4.2: Paul, R. (1985). The emergence of pragmatic comprehension: A study of children's understanding of sentence-structure cues to given/new information. *Journal of Child Language*, 12(1), 167; adapted with the permission of Cambridge University Press.

Pages 151–155, Procedures 4.4–4.6: Paul, R. (1995). *Language disorders from birth through adolescence: Assessment and intervention*. St. Louis: C.V. Mosby; adapted by permission.

Case studies described in this book come from composite multiple experiences of the authors. Names are pseudonyms. Any similarity to actual individuals or circumstances is coincidental and no implications should be inferred.

Readers have permission to photocopy the score sheets in this book for clinical purposes.

The plates on pages 66–113 were drawn by Dave Erickson.

#### Library of Congress Cataloging-in-Publication Data

Miller, Jon F.

The clinical assessment of language comprehension / by Jon F. Miller and Rhea Paul.

p. cm.

Includes bibliographical references and index.

ISBN 1-55766-176-6

1. Language disorders in children—Diagnosis. 2. Language acquisition—Testing. I. Paul, Rhea II. Title  
[DNLM: 1. Language Tests—in infancy & childhood. 2. Language Development 3. Cognition—in infancy  
& childhood. WS 105.5C8 M648c 1995]

RJ496.L35M543 1995

618.92\855075—dc20

DNLM/DLC

for Library of Congress

94-35065  
CIP

British Library Cataloguing-in-Publication data are available from the British Library.



# Contents

---

About the Authors . . . . .	ix
Preface . . . . .	xi
For the Reader . . . . .	xiii
Acknowledgments . . . . .	xv
1 Understanding Comprehension and Comprehension Assessment . . . . .	1
2 Assessing Comprehension in the Emerging Language Stage . . . . .	23
• Developmental level: 8–24 months	
• Language level: Brown’s stages I–II; MLU 1.0–2.5	
• Production milestones: At this level, children are producing single words and some early word combinations. Vocabulary size is generally small, fewer than 100 words. Few morphological markers are used. Phonological repertoire may also be limited, with certain consonants and syllable types (consonant-vowel-consonant [CVC], multisyllabic words) missing.	
Procedure 2.1. Comprehension of Familiar Routines . . . . .	26
Procedure 2.2. Joint Reference Activity . . . . .	27
Procedure 2.3. Comprehension of Object and Person Names . . . . .	28
Procedure 2.4. Comprehension of Action Words . . . . .	30
Procedure 2.5. Comprehension of Words for Absent Persons and Objects . . . . .	31
Procedure 2.6. Comprehension of Early Two-Word Relations . . . . .	32
Procedure 2.7. Turn-Taking in Discourse . . . . .	34
Score Sheet: Assessing Comprehension of Words and Simple Sentences . . . . .	35
Score Sheet: Assessing Turn-Taking in Discourse . . . . .	36
3 Assessing Comprehension in the Developing Language Stage . . . . .	37
• Developmental level: 24–60 months	
• Language level: Brown’s stages III–IV; MLU 2.5–4.5	
• Production milestones: During this stage, children are acquiring the basic vocabulary and syntax of the language. Vocabulary size is expanding rapidly. Morphological markers are beginning to be used in speech. A variety of sentence forms, such as questions and negatives, are beginning to contain appropriate syntactic marking. Toward the end of the stage, complex sentences begin to be used. Phonological simplification processes may interfere with intelligibility.	
Procedure 3.1. Understanding Illocutionary Intent in Indirect Requests in Discourse . . . . .	43
Procedure 3.2. Providing Contingent Responses . . . . .	44
Procedure 3.3. Comprehension of Two- and Three-Word Instructions with Toys as Agents . . . . .	45
Procedure 3.4. Comprehension of Locatives: Search Task . . . . .	47
Procedure 3.5. Comprehension of Locatives: Placement Task . . . . .	48
Procedure 3.6. Comprehension of Locatives: Body Placement Task . . . . .	49
Procedure 3.7. Word Order Comprehension . . . . .	50
Score Sheet: Word Order Comprehension . . . . .	52
Interpretation Form: Word Order Comprehension . . . . .	53
Stimulus Items: Word Order Comprehension . . . . .	54
Procedure 3.8. Question Comprehension: Conversational Format . . . . .	114

Procedure 3.9. Question Comprehension: Structured Format . . . . .	116
Procedure 3.10. Understanding of Preparatory and Sincerity Conditions for Speech Acts . . . . .	118
Procedure 3.11. Recognizing Polite Requests . . . . .	119
Procedure 3.12. Responding to Requests for Clarification . . . . .	120
Procedure 3.13. Making Inferences in Discourse . . . . .	121
Score Sheet: Assessing Illocutionary Intent in Requests . . . . .	122
Score Sheet: Assessing Contingent Responding . . . . .	123
Score Sheet: Assessing Comprehension of Two- and Three-Word Instructions with Toys as Agents . . . . .	125
Score Sheet: Assessing Comprehension of Locatives . . . . .	126
Score Sheet: Assessing Answers to Questions . . . . .	127
Script Score Sheet: Question Comprehension: Structured Format . . . . .	128
Script Score Sheet: Question Comprehension: Structured Format . . . . .	131
Score Sheet: Understanding of Preparatory and Sincerity Conditions for Speech Acts . . . . .	133
Score Sheet: Recognizing Polite Requests . . . . .	134
Score Sheet: Responding to Requests for Clarification . . . . .	135
Score Sheet: Making Inferences in Discourse . . . . .	136
4 Assessing Comprehension in the Language for Learning Stage . . . . .	137
• Developmental level: 5–10 years	
• Language level: Brown’s stages V+; MLU 4.5 and up	
• Production milestones: Vocabulary is large (greater than 5,000 words). Basic syntax in simple sentences has been acquired; few grammatical errors are heard in speech. Some complex sentences (about 20% of utterances in speech samples from typically developing children [Paul, 1981]) are used. Most morphological markers are used consistently, although a few errors (e.g., overgeneralization of past tense) may persist. Most phonological simplification processes have been eliminated; one or two may remain. Distortions of a few sounds may also be present. Speech is intelligible.	
Procedure 4.1. Examining Individual Syntactic Structures in Object Manipulation Tasks . . . . .	143
Procedure 4.2. Protocol for Judgment Task for Assessing Comprehension of Passive Sentences . . . . .	146
Procedure 4.3. Recognizing Appropriate Speech Styles . . . . .	149
Procedure 4.4. Criterion-Referenced Assessment of Center-Embedded Relative Clauses . . . . .	151
Procedure 4.5. Comprehension of Spatial, Temporal, and Connective Terms in Classroom Vocabulary . . . . .	152
Procedure 4.6. Criterion-Referenced Assessment of Classroom Direction Vocabulary . . . . .	154
Score Sheet: Grammatical Forms for Testing by Object Manipulation . . . . .	156
Score Sheet: Assessing Comprehension of Passive Sentences with Judgment Tasks . . . . .	159
Score Sheet: Appropriate Speech Styles . . . . .	160
Score Sheet: Criterion-Referenced Assessment of Center-Embedded Relative Clauses . . . . .	161
Score Sheet: Comprehension of Spatial, Temporal, and Connective Terms . . . . .	162
Score Sheet: Criterion-Referenced Assessment of Classroom Direction Vocabulary . . . . .	163

---

5 Case Studies in Comprehension Assessment . . . . .	165
References . . . . .	175
Glossary . . . . .	179
Index . . . . .	181

---



## About the Authors

---

**Jon F. Miller, Ph.D.**, is Professor and Chair of the Department of Communicative Disorders and is Director of the Language Analysis Laboratory at the Waisman Center on Mental Retardation and Human Development Research Center, University of Wisconsin–Madison. Dr. Miller has published extensively in the areas of child language development and disorders, language assessment, and language intervention. His current research is focused on quantifying disordered language performance using computer-assisted language sample analysis software (SALT: Systematic Analysis of Language Transcripts) and a reference database of more than 250 typically developing children. In addition, he has been investigating early language development in children with Down syndrome in a longitudinal research project funded by the National Institutes of Health since 1988.

**Rhea Paul, Ph.D.**, is Professor of Speech and Hearing Sciences at Portland State University, Director of the Portland Language Development Project, and a Fellow of the American Speech-Language-Hearing Association. She has published numerous research articles on children's language disorders and is author of *Pragmatic Activities for Language Intervention* and *Language Disorders from Birth Through Adolescence: Assessment and Intervention*.



# Preface

---

This volume was written to provide clinicians and researchers with assessment tools for evaluating children who cannot meet the cognitive, perceptual, or motor requirements of standardized tests or to evaluate aspects of language not assessed by other published measures. The procedures presented here evolved from our clinical practice and the need to assess the language comprehension skills of children with a variety of developmental disabilities. We have always believed that assessing language comprehension in these populations is very important because comprehension status cannot be assumed from language production ability. In a variety of populations, with documented or suspected dysarthria or apraxia of speech, for example, it is essential to evaluate language comprehension to determine the extent to which productive language is limited by impairments of speech motor control, rather than limitations in language competence. As another example, research has shown that children with Down syndrome consistently show better language comprehension skills, relative to productive level. Although we do not understand the cause(s) of this gap, it is clear that these children's enhanced comprehension status must be documented in order to help parents understand their child's abilities and potential, to help teachers develop appropriate curricula, and to aid clinicians in focusing intervention strategies. As a final example, comprehension status is critical for evaluating children who are candidates for augmentative and alternative communication systems. If comprehension status can be documented, then appropriate language content can be developed for a communication device.

The diversity of the measures included in this volume reflects the complexity of language and the breadth of adaptations required to solve the clinical problems of assessing comprehension skills throughout the developmental period. The measures presented in this volume are not a comprehensive list of all possible informal methods of comprehension assessment. Instead they are intended to enhance our assessment repertoire, and their creative use will improve our ability to measure this private event, the understanding of language.





# For the Reader

---

This book was written as a clinical manual for practicing speech-language pathologists. As such, it assumes a great deal of knowledge about children's language development and disorders. Readers who believe they need additional background information about the topics presented here may want to familiarize themselves with one of the many excellent textbooks on language development that are now available.

For readers using this book for the first time, it will help to read Chapter 1, and the introductory text to each of the second, third, and fourth chapters before trying any of the procedures. This material provides information about specific issues concerning language comprehension and its assessment. Reading Chapter 5 next will help put the whole enterprise in perspective. It demonstrates, with concrete examples, how the procedures given in the book can be used in the context of a comprehensive communication evaluation for children at a variety of developmental levels.

The procedures given in the book represent a sampling of the kinds of informal assessments that can be used to enhance our understanding of the comprehension skills of very young or hard-to-test children. We do not intend that every procedure be used with every child a clinician sees. Rather, the procedures given here are meant to supplement more standardized forms of assessment, and to augment the picture of a child's comprehension skills. As the examples in Chapter 5 show, often only one or two procedures will be selected for each assessment case. These procedures will be used in conjunction with a range of tests, language sample analyses, and behavioral observations, in order to obtain a broad portrait of a child's communicative competence. Clinicians should, of course, select procedures that are appropriate for the developmental level of the child, using the production milestones guide given in each chapter. Selection of procedures will also be dictated by questions left unanswered by other aspects of the assessment. For example, if a clinician finds that a child fails to answer *where* questions on a standardized comprehension test, using a non-standardized procedure to explore question comprehension can help determine whether the child does better in a friendlier, richer environment and, if so, whether the child can use cues in the discourse to help improve performance. If he or she can, the findings of the standardized test results can be balanced against our understanding of the situations in which the child can succeed.

Clinicians should also bear in mind that the procedures given here are merely examples. Our hope is to get clinicians thinking about comprehension, so they can develop their own informal methods of investigating this important aspect of communication. None of these procedures is meant as the "last word"; rather each is intended as a beginning, a way to initiate a larger set of methods to be used and shared clinically. Clinicians are encouraged to take off from these procedures and create new ones that address other areas, other developmental levels, or other kinds of disabling conditions.

Sample score sheets are provided at the end of Chapters 2, 3, and 4. They are marked with black tabs for easy reference, and readers are granted permission to photocopy them as needed. They are, however, just examples. Clinicians can create any form that they find efficient to use. We encourage clinicians to experiment with modifying the score sheets given here in order to find the most effective way of recording clinical data. Similarly, many of the score sheets include linguistic stimuli (words or sentences) that can be used as assessment items. These, too, are only examples. Clinicians may use them, if they are appropriate for a particular child; however, they do not have to be used. Any linguistic stimuli that address the issue being assessed are acceptable. The important

points to ensure are that the child knows the individual words in the procedure before testing any comprehension of multiword sentences, and that the stimuli are appropriate for the interests and abilities of the child. If the examples on the score sheet don't meet these criteria, clinicians should not use them. Instead, they should create others that address the needs of the child. The strength of informal assessment is its flexibility. We strongly encourage readers to take advantage of that flexibility, using this manual as a guide, rather than as gospel.



# Acknowledgments

---

We thank master clinicians Peggy Rosin and Gary Gill for their clinical insight, expertise, and enthusiasm, which sparked the creation of many of the procedures presented in this volume. Certainly their work with student clinicians evaluating children with a variety of developmental disabilities played an important role in the evolution of these measures to their present form. We also thank our colleague Robin Chapman for her many contributions to our understanding of children's development in general and of comprehension skills and strategies in particular, and her wise counsel on so many things.

Generations of students have passed through the Language Assessment Seminar and the Waisman Center Developmental Disabilities Clinic, creating and testing new comprehension procedures to meet their clients' needs. Their contributions to this work are gratefully acknowledged.

We also recognize Leslie Miller, John Chapman, Gary Gill, and Peggy Rosin, who served as models for the drawings used in Procedure 3.7.

Finally, we are indebted to Kathy Boyd, our editor, for her brilliant solution to the format problem this book presented, and the staff at Brookes Publishing Co. for their creativity and enthusiasm for this book.

To our children:

Karen, Leslie, and Meghan

Willy, Marty, and Aviva

---