

Contents

Introduction	1	
1. Readability Formulas: Matching Tool and Task		5
<i>Bertram Bruce and Andee Rubin</i>		
Motivation for Readability Formulas	5	
Problems with Readability Formulas	7	
Assumptions About Readability Measures and Their Use	18	
Consequences of Violating the Assumptions	19	
Conclusion	20	
References	21	
2. Conceptual and Empirical Bases of Readability Formulas		23
<i>Richard C. Anderson and Alice Davison</i>		
Inappropriate Statistical Model	26	
Word Difficulty	27	
Limitations on Processing Capacity	41	
Prior Knowledge	43	
Interestingness	45	
Conclusion	48	
References	49	

3. Cognitive Approaches to Assessing the Readability of Text	55
<i>Eva L. Baker, Nancy K. Atwood, and Thomas M. Duffy</i>	
Study Procedures	61
Results	64
Discussion	79
References	81
4. Readability Vs. Comprehensibility: A Case Study in Improving a Real Document	85
<i>Veda Charrow</i>	
Materials	86
Subjects	87
Methodology	88
Procedure	88
Scoring	89
Results	90
Conclusions and Recommendations	95
References	101
Appendix A	103
Appendix B	110
5. Preferences for and Comprehension of Original and Readability Adapted Materials	115
<i>Georgia M. Green and Margaret S. Olsen</i>	
Introduction	116
Experimental Results	123
Results	126
Conclusions	138
References	140
6. Inferential Complexity and the Readability of Tests	141
<i>Susan Kemper</i>	
The Event-Chain Analysis of Texts	142
Predicting Comprehensibility	149
Reading Times and Question-Answering	153
Conclusion	162
References	164

7. Syntactic Complexity and Reading Acquisition	167
<i>Stephen Crain and Donald Shankweiler</i>	
Introduction	167
Two Hypotheses About Reading Acquisition	169
Implications of Language Acquisition for Reading	174
Summary and Conclusions	187
References	189
8. The Study of Linguistic Complexity	193
<i>Lyn Frazier</i>	
Motivation for Linguistic Complexity Metrics	194
Structure of the Language Comprehension Task	195
Summary	218
References	219
9. Of Butchers and Bakers and Candlestick-Makers: The Problem of Morphology in Understanding Words	223
<i>Janet H. Randall</i>	
Introduction	223
The Tasks of Decoding	225
Linguistic Factors in Readability: Preliminaries	228
Of <i>Pilots</i> and <i>Fliers</i> : Acquiring the Vocabulary of Agents	231
Testing Children's Comprehension of Agents	234
Experiment II: An Error of Category or Opacity?	239
An Alternate Hypothesis: Word Length and Frequency	241
Conclusions	243
References	244
10. Factors of Linguistic Complexity and Performance	247
<i>Carlota S. Smith</i>	
Linguistic Complexity	249
The Experiments	256
The Imitation Studies	262
The Experimental Tasks	266
Remarks on Linguistic Complexity	270
References	277
Appendix	278
Author Index	281
Subject Index	287