

**Readability Indices, Teachers' Factors and Academic Achievement in Comprehension Test
among Senior Secondary School Students in Oyo State**

Olusola Fidelis OLATAYO
LCU/PG/001136

**Being a PhD Post-Field Presentation Submitted to the Department of Arts & Social Science
Education, Faculty of Education, Lead City University Ibadan, Oyo State Nigeria**

**In Partial Fulfillment of the Requirements for the Award of Doctor of Philosophy Degree
(PhD) in Language Education**

2023

Certification

This is to certify that Olusola Fidelis OLATAYO with matriculation Number LCU/PG/001136 carried out this research work title “Readability Indices, Teachers’ Factors and Academic Achievement in Comprehension Test among Senior Secondary School Students in Oyo State” in the department of Arts & Social Science Education, Faculty of Education, Lead City University Ibadan, Oyo State, for the award of Doctor of Philosophy Degree (PhD) in Language Education and this thesis has not been previously submitted to any other publication outlet.

Dr. Rachel Oluwafisayo Aluko
Supervisor

Date

Prof. Senimatu Ileuma
Head of Department

Date

Dedication

This project is dedicated to the Almighty God for his love, grace, and faithfulness that has brought me this far and also to my families and loved ones

Do Not Copy, Lead City University, Nigeria

Acknowledgement

My profound gratitude goes to Lead City University Ibadan, and the entire staff of faculty of Arts and Education, I would also like to appreciate all the principals and the English Language teachers in the schools used for the research as well as my research assistant.

Likewise, I would like to appreciate all the staff in the Department of English and Literally studies, Lead City University Ibadan, Most especially my supervisor Dr. R.O. Aluko for her scholarly and meticulous checking of the thesis from the conception to the final stage. Her keen interest in the work as well as her constructive guidance made a successful completion of the research. My appreciation equally goes to the Provost of Postgraduate College, Professor A. Oredein for her contribution towards re-shapening the title of the thesis during the Pre-field presentation.

I am equally grateful to my Head Department Professor S. Iluema who took time to guide and advise me when writing the thesis. I would also like to appreciate Dr. G. Gbadegesin for his assistance too.

More importantly, I would like to acknowledge the with deep and sincere sense of gratitude the contributions of my immediate family both in kind and cash, thank you all

“Even though the above mentioned institutions and persons have assisted in the process of this research work, I alone stand responsible for the errors, if any, found in this work”.

Abstract

With the intention of alleviating the problems of inability to read efficiently among senior secondary school students in Oyo State schools, this study was undertaken to determine the suitability of the comprehension passages in the English Language textbook for senior secondary school ii. The passages were subjected to various readability tests: sentence length: lexical density, syntactic complexity and cloze deletion. Questionnaires were also used to determine the level of teachers influence on the problem. One thousand five hundred students from 288 schools across the three senatorial districts were used. One hundred and twenty English Language teachers responded to the questionnaires. The results of the tests and the responses to the questionnaires were analyzed using text readability consensus calculator; simple percentage, correlation and regression analyses. The findings from the analyses showed that the passages on average (i) contain sentences with twenty words per sentence (ii) Are 55% lexically dense (iii) That the degree of syntactic complexity is 81% (iv) That most of the students were reading the passages at frustration level. The result of the hypotheses tested revealed that at ($P \leq 0.05$) with p value of .890 there was significant relationship between readability indices and students' achievement in comprehension test, also at p value of .546 there was moderate positive relationship between Teachers' factors and students' achievement in comprehension test. Precisely, the overall result of the findings showed that the textbook analyzed is not suitable for the target students. Based on these findings, it was recommended that: the passages in the analyzed textbook should be given to readability experts for adjustment; recommendation of textbook for students should be guided by readability tests. In addition more English Language Teachers should be employed into Public Secondary Schools in Oyo state.

Keywords: Readability, Lexical Density, Syntactic complexity, Sentence Length

Word Count: 287

Table of Contents

Content	Page
Title Page	i
Certification	ii
Dedication	iii
Acknowledgment	iv
Abstract	v
Table of Contents	vi
List of Tables	xi
List of Figures	xiii
Chapter One: Introduction	
1.1 Background to the Study	1
1.2 Statement of the Problem	16
1.3 Aim and Objectives of the Study	17
1.4 Research Questions	18
1.5 Hypotheses	18
1.6 Significance of the Study	19

1.7	Scope of the Study	19
1.8	Limitation of the Study	20
1.9	Operational Definitions of Terms	20
Endnotes		23
Chapter Two: Literature Review		
2.1	Conceptual Review	27
2.1.1	The Concept of Reading	27
2.1.2	Why Reading	35
2.1.3	Types of Reading	37
2.1.4	Purpose of Reading	39
2.1.5	Levels of Reading Comprehension	41
2.1.6	Levels of Reading Difficulties	43
2.1.7	Factors Affecting Formation of Good Reading Habit among Nigerian Secondary School Students	44
2.1.8	Meaning of Readability	47
2.1.9	History of Readability	51
2.1.10	Levels of Readability	54
2.1.11	Variables Affecting Readability	56

2.1.12	Readability Formulas	57
2.1.13	Validity and Reliability of the Readability Formulas	60
2.1.14.	The Readability Tests Adopted in the Research	63
2.1.15	Teachers' Factors	63
2.2	Theoretical Framework	67
2.2.1	Tagmemics Grammatical Theory	67
2.2.2	Systemic Functional Linguistic Theory	69
2.2.3	Transformational Generative Grammar (TGG)	74
2.3	Review of Empirical Studies	81
2.4	Conceptual Model	89
2.5	Summary of Gap in Literature Reviewed	90
Endnotes		94
Chapter Three: Methodology		
3.1	Research Design	100
3.2	Population of the Study	100
3.3	Sample and Sampling Techniques	105
3.4	Description of the Research Instruments for Data Collection	109
3.4.1	Cloze Deletion Test (CDT)	109
3.4.2	Written Comprehension Test (WCT)	110

3.4.3	Lexical Density Test (LDT)	110
3.4.4	Syntactic Complexity Text (SCT)	112
3.4.5	Average Sentence Length Test (ASLT)	112
3.4.6	Age Grade Test (AGT)	113
3.4.7	Teachers Factor Questionnaire (TFQ)	113
3.5	Validity of the Instrument	114
3.6	Reliability of the Instruments	114
3.7	Method of Data Collection	114
3.8	Method of Data Analysis	115
	Endnotes	116
	Chapter Four: Results and Discussion of findings	
4.1	Demographic Data Analysis	117
4.2	Presentation of Data	119
4.3	Discussion of Findings	131
	Endnotes	137
	Chapter Five: Conclusion	
5.1	Summary of Findings	138
5.2	Conclusion	139
5.3	Recommendations	140
5.4	Contribution to Knowledge	141
5.5	Suggested Areas for Further Research	142
	Bibliography	143
	Appendix	151

Bio-data	216
The University Compliance Certification	226

Do Not Copy, Lead City University, Nigeria

List of Tables

Table	Title	Page
3.1	Population of the Study is 625 for Schools	101
3.2	Population of the Study is 1260 for English Language Teachers and 65,079 for the SS2 Students	103
3.3	Selection of Local Government Councils Across Senatorial District	106
3.4	Distribution of the Sampled Local Government Councils with the Number of Secondary Schools in Each Council and the Number of Sampled Schools and Students in Each Council	108
3.5	Cloze Scores and Readability Levels	110
3.6	Ure's Method	111
3.7	Halliday's Method	111
3.8	Sentence Length Formula	113
4.1	Teachers Statistics	117
4.2	Age of Teachers	117
4.3	Teachers Experience	117
4.4	Teachers Gender	118
4.5	Teachers Educational Qualification	118
4.6	Teachers Registration Council Number (TRCN)	118
4.7	Average Sentence Length Test (ASLT)	120
4.8	Lexical Density Test (LDT)	121
4.9	Syntactic Complexity Test (SCT)	122
4.10	Showing the Scores of the Students in Cloze Deletion Test and Their Readability Level	123
4.11	Readability Consensus	124

4.12	Descriptive Statistics	125
4.13	Correlations	125
4.14	Descriptive Statistics	126
4.15	Correlations	126
4.16	Variables Entered/Removed	128
4.17	Model Summary	128
4.18	ANOVA	129
4.19	Coefficients	130
4.20	Flesch's Analysis of the Readability of Reading Materials	131

Do Not Copy, Lead City University, Nigeria

List of Figures

Figure	Title	Page
2.1	Aspect Model or Standard Theory	75
2.2	The Constituent Structure Of Sentence	77
2.3	Conceptual Model on Readability Indices and Teachers Factors	89
4.1	Frequency of Teachers Age	151
4.2	Frequency of Teachers Experience	152
4.3	Frequency of Teachers Gender	153
4.4	Frequency of Teachers Educational Qualification	154
4.5	Frequency of Registered And Unregistered Teachers	155

List of Abbreviations

EFL	English as a foreign language
TGG	Transformational Generative Grammar
CDT	Cloze Deletion Test
WCT	Written Comprehension Test
LDT	Lexical Density Test
SCT	Syntactic Complexity Text
ASLT	Average Sentence Length Test
AGT	Age Grade Test
TFQ	Teachers Factor Questionnaire
SSCE	Senior School Certificate Examination
WASSCE	West Africa Senior Secondary School Certificate Examination
NSSCE	National Senior Secondary School Certificate Examination
JAME	Joint Admission and Matriculation Examination
UTME	Universal Tertiary Institution Matriculation Examination
SFL	Systemic Functional Linguistics