

THE COMPARISON OF THE LEARNABILITY AND RECOGNITION BETWEEN BLISSYMBOLICS AND CYBERGLYPHS

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Mr. Willie Louw for technical support

Mr. Berunski, the teachers and students of Marakele Primary School in Mamelodi for participating in the study

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TITLE: The comparison of the learnability and recognisability between

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There are many symbols in the symbol system available with different characteristics that affect learning. These characteristics must be carefully considered when the

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match between the user and system. Variables to be considered include user, tool distinctions, size, and

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design and quality experienced in the system. These variables influence the way

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The symbol system was developed to compare in terms of learnability and recognisability.

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In the symbol system, during four different stages after the initial training, a person receives a period of seven days' withdrawal and after 50 days of withdrawal. The overall performance between Blue and Glyphs was compared in terms of the percentage of symbols correctly recognised after training and after withdrawal. The symbols were also divided into different word categories, namely nouns, verbs, adjectives, prepositions and pronouns. The overall performance in the different word categories was also analysed to investigate any possible differences in performance in these categories. Five AAC specialists rated the symbols according

SUMMARY

TITLE: The comparison of the learnability and recognition between Blissymbolics and CyberGlyphs.

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There are many graphic symbol sets/systems available with different characteristics that affect learnability. These characteristics must be carefully considered when the clinician selects a system for an AAC user to ensure that there is a meaningful match between the user and system. Variables to be considered include iconicity, semantic transparency/translucency, complexity, perceptual distinctness, size, and degree of ambiguity represented in the system. These variables influence the way in which a symbol system is learned and the effectiveness in which these symbols can be later recognised.

This study aims to describe how two different graphic symbol systems, namely Blissymbolics and CyberGlyphs, compare in terms of learnability and recognition. Data were obtained by teaching 80 (40 from each symbol system) different concepts to 50 Northern Sotho students ranging from grade 4 to grade 6. They were tested on symbol recognition during four different stages: after the initial training, a revision session, a period of seven days' withdrawal and after 30 days of withdrawal. The overall performance between Bliss and Glyphs was compared in terms of the percentage of symbols correctly recognised after training and after withdrawal. The symbols were also divided into different word categories, namely nouns, verbs, adjectives, prepositions and pronouns. The overall performance in the different word categories was also analysed to investigate any possible differences in performance in these categories. Five AAC specialists rated the symbols according

to an iconicity rating scale. The results obtained during the study were compared to the iconicity ratings of the specialists.

The results indicated that the subjects performed better on CyberGlyphs than on Blissymbols. This was also the case for all the different word categories. The iconicity ratings were higher for Glyphs on nouns and verbs, but lower on adjectives. Prepositions and pronouns scored similarly. The possibility of cultural influences on the results was discussed.

This study highlighted the importance of investigating a graphic symbol system in terms of how well it can be learned, and how effectively the symbols can be recognised for the successful implementation of the system. It is apparent, however, that although important, learnability of a system is not the only variable to be considered when selecting a system for communication purposes.

KEYWORDS:

Blissymbolics

CyberGlyphs

Learnability

Recognition

Graphic symbol systems

Comparison

Iconicity

Word categories

Culturally diverse

Northern Sotho

OPSOMMING

TITLE: Die vergelyking van die aanleerbaarheid en herkenning tussen Blissimbole en CyberGlyphs.

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Verskeie veranderlikes is geïdentifiseer wat die aanleer en die herkenning van grafiese simbool sisteme kan beïnvloed. Hierdie veranderlikes sluit onder andere in: Ikonisiteit, semantiese deurskynendheid/deursigtigheid, kompleksiteit, perceptuele kenmerkendheid, grootte, en graad van tweeledigheid. Hierdie veranderlikes beïnvloed die wyse waarop 'n simbool sisteem aangeleer word, en die effektiwiteit waarmee die simbole weer herken kan word.

Hierdie studie poog om twee grafiese simboolsisteme met mekaar te vergelyk (Blissimbole en CyberGlyphs) in terme van aanleerbaarheid en herkenning van simbole. Tagtig simbole is aan 'n groep van 50 Noord-Sotho sprekende kinders (tuseen graad 4 en graad 6) aangeleer. Elke groep is blootgestel aan 40 simbole van elke simboolsisteem. Hulle is op vier verskillende stadia getoets in terme van hoeveel simbole hulle herken. Die vier stadia sluit die eerste opleidingssessie, 'n hersieningssessie, 'n tydperk van sewe dae onttrekking en 'n tydperk van 30 dae ontrekking in. Die prestasie tussen Bliss en Glyphs is met mekaar vergelyk na elke sessie. Verder is die simbole verdeel in verskillende woordsoortgroepe: Selfstandige naamwoorde, werkwoorde, byvoeglike naamwoorde, voorsetsels en voornaamwoorde. Die simbole was ook beoordeel in terme van hul ikonisiteit deur AAK spesialiste.

Die resultate dui op 'n algemene beter prestasie van die kinders op Glyphs. Dit was ook die geval met die verskillende woordsoortgroepe. Die ikonisiteitsbeoordeling het gedui op hoër ikonisiteit van Glyphs op selfstandige naamwoorde en werkwoorde. Bliss het wel hoër ikonisiteit gehad met die byvoeglike naamwoorde, maar die waardes van albei sisteme was dieselfde vir die voorsetsels en voornaamwoorde. Die belang van kulturele verskille in die ontleding van die resultate is ook bespreek.

Die studie lig die belangrikheid uit dat 'n grafiese simboolsysteem ondersoek moet word in terme van hoe effektief die sisteem aangeleer kan word, en hoe effektief die simbole herken kan word vir praktiese gebruik daarvan. Alhoewel die aanleerbaarheid van 'n sisteem belangrik is, is dit nie die enigste kriteria wat in ag geneem moet word met die keuse van 'n simboolsysteem nie.

1.2.3. Little or no functional speech

1.2.5. AAC user

SLEUTELWOORDE:

Blissimbole
CyberGlyphs
Aanleerbaarheid
Herkenning
Grafiese simboolsysteeme
Ikonisiteit
Woordkategoriee
Kulturele diversiteit
Noord-Sotho

2.1. INTRODUCTION	1
2.1.1. Scope of the chapter	2
2.2. COMPARISON BETWEEN BLISSYMBOLS AND CYBERGLYPHS	3
2.2.1. Blissymbols	6
2.2.1.1. Rules for expansion	7
2.2.1.2. Types of Blissymbols	9
2.2.1.3. Symbol composition	10
2.2.1.4. Advantages and disadvantages	10
2.2.2. CyberGlyphs	11

TABLE OF CONTENTS

CHARACTERISTICS INFLUENCING THE LEARNABILITY

CHAPTER 1: INTRODUCTION

1.1. PROBLEM STATEMENT.....	1
1.2. DEFINITION OF TERMS.....	3
1.2.1. Learnability.....	3
1.2.2. Retention.....	3
1.2.3. Graphic symbol systems.....	3
1.2.4. Little or no functional speech.....	3
1.2.5. AAC user.....	3
1.2.6. Northern Sotho.....	4
1.2.7. CyberGlyphs.....	4
1.2.8. Blissymbols.....	4
1.3. ABBREVIATIONS.....	4
1.4. SUMMARY.....	5

CHARACTERISTICS INFLUENCING THE LEARNABILITY

CHAPTER 2: LITERATURE REVIEW

2.1. INTRODUCTION.....	6
2.1.1. Scope of the chapter.....	6
2.2. COMPARISON BETWEEN BLISSYMBOLS AND CYBERGLYPHS.....	6
2.2.1. Blissymbolics.....	6
2.2.1.1. Rules for expansion.....	7
2.2.1.2. Types of Blissymbols.....	9
2.2.1.3. Symbol composition.....	10
2.2.1.4. Advantages and disadvantages.....	10
2.2.2. CyberGlyphs.....	11

2.2.2.1.	Rules for expansion.....	12
2.2.2.2.	Symbol formation.....	15
2.2.2.3.	Advantages and disadvantages.....	16
2.3.	CHARACTERISTICS INFLUENCING THE LEARNABILITY OF GRAPHIC SYMBOL SYSTEMS.....	17
2.3.1.	Iconicity.....	17
2.3.2.	Semantic transparency/translucency.....	19
2.3.3.	Complexity.....	21
2.3.4.	Teaching method.....	23
2.3.5.	Other characteristics influencing learnability.....	24
2.3.6.	Word categories.....	26
2.3.7.	Cultural factors.....	26
2.4.	RECALL AND RECOGNITION OF SYMBOLS AS INDICATORS OF LEARNABILITY.....	28
2.4.1.	The importance of comparing the learnability and recognition of different graphic symbol systems.....	28
2.4.2.	Learning and recognition.....	29
2.5.	SUMMARY.....	30

CHAPTER 3: RESEARCH METHODOLOGY

3.1.	INTRODUCTION.....	31
3.2.	AIM AND SUB AIMS.....	31
3.2.1.	Aim.....	31
3.2.2.	Sub aims.....	31
3.3.	RESEARCH DESIGN.....	32
3.4.	SUBJECTS.....	33
3.4.1.	Selection criteria.....	33
3.4.2.	Description of Subjects.....	35
3.4.3.	Selection of Trainer.....	37
3.4.3.1.	Purpose.....	37

3.4.3.2.	Training.....	37
3.5.	PILOT STUDY.....	38
3.6.	MAIN STUDY.....	41
3.7.	MATERIAL USED DURING DATA COLLECTION IN THE PRE-TRAINING, TRAINING- AND POST-TRAINING PHASES.....	41
3.8.	THE DEVELOPMENT OF TESTING/TRAINING MATERIAL.....	42
3.8.1.	Symbols.....	43
3.8.1.1.	Symbol selection.....	43
3.8.1.2.	Word categories.....	44
3.8.1.3.	Level of difficulty of selected concepts.....	44
3.8.1.4.	Development of new symbols.....	45
3.8.2.	Paragraphs.....	47
3.9.	DESCRIPTION OF SYMBOLS IN TERMS OF ICONICITY.....	48
3.9.1.	Results of the iconicity rating.....	49
3.10.	DATA COLLECTION PROCEDURE.....	51
3.10.1.	General principles used in the training phase.....	51
3.10.2.	Training procedure.....	52
3.10.3.	Testing: Post-training and withdrawal procedures.....	56
3.11.	DATA ANALYSIS.....	56
3.11.1.	Procedures for testing.....	56
3.11.2.	Error analysis.....	57
3.12.	DATA PROCESSING AND STATISTICAL ANALYSIS..	58
3.12.1.	The t-test.....	58
3.13.	SUMMARY.....	59
	RECOMMENDATIONS FOR FUTURE RESEARCH.....	70
3.4.	SUMMARY.....	70
	REFERENCES.....	76
	APPENDIX.....	83

CHAPTER 4:**RESULTS AND DISCUSSION**

4.1. INTRODUCTION.....	60
4.2. THE PERFORMANCE OF GROUP 1 AND GROUP 2 ON BLISSYMBOLS AND CYBERGLYPHS IN TERMS OF LEARNABILITY AND RECOGNITION.....	60
4.3. THE SIGNIFICANCE OF THE DIFFERENCE IN PERFORMANCE BETWEEN BLISS AND GLYPHS.....	63
4.3.1. Significance of the t-test scores.....	63
4.4. PERFORMANCE ON DIFFERENT WORD CATEGORIES.....	64
4.4.1. Nouns.....	65
4.4.2. Verbs.....	66
4.4.3. Adjectives.....	66
4.4.4. Prepositions.....	67
4.4.5. Pronouns.....	67
4.5. POSSIBLE INFLUENCING FACTORS ON THE PERFORMANCE BETWEEN BLISS AND GLYPHS.....	68
4.6. SUMMARY.....	71

CHAPTER 5:**SUMMARY, CONCLUSION & RESEARCH
IMPLICATIONS**

5.1. INTRODUCTION.....	72
5.2. SUMMARY OF RESULTS AND CONCLUSIONS.....	72
5.3. CRITICAL EVALUATION OF THE STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH.....	73
5.4. SUMMARY.....	75
REFERENCES.....	76
APPENDIX.....	83

LIST OF TABLES

Table I:	Rules for expansion of Blissymbols.....	7
Table II:	Different types of Blissymbols.....	9
Table III:	Means of Blissymbol composition.....	10
Table IV:	Rules for CyberGlyph production.....	12
Table V:	Symbol formation of CyberGlyphs.....	14
Table VI:	Different symbol types.....	15
Table VII:	Symbol composition of CyberGlyphs.....	16
Table VIII:	The iconicity/learnability of Blissymbols compared to other AAC sets/systems.....	18
Table IX:	Visual presentation of the research design.....	32
Table X:	Criteria and procedures used for subject selection.....	34
Table XI:	Age groups, scholastic levels and grades of the subjects selected.....	36
Table XII:	The aims, methods, results and recommendations of the pilot study.....	38

Table XIII:	A summary of the duration and percentages of the symbols correctly identified during the pilot study using the global and analytical approach.....	40
Table XIV:	The data collection material used during the pre-training, training and post-training phases.....	42
Table XV:	Layout of the training material used in the main study..	43
Table XVI:	New symbols developed for the study.....	45
Table XVII:	The distribution of word categories over the four paragraphs.....	48
Table XVIII:	Iconicity rating scale.....	49
Table XIX:	Individual ratings by five iconicity raters.....	49
Table XX:	Schematic presentation of the training and post-training phases.....	55
Table XXI:	Analysis of the presentation of the testing material.....	57
Table XXII:	The average recognition of Group 1 and Group 2 on Blissymbols and CyberGlyphs.....	61
Table XXIII:	Standard deviance and t-values of the performance of Group 1 and Group 2.....	63
Table XXIV:	P-values or exceedance probabilities for the different word categories during all stages of testing.....	64

LIST OF FIGURES

Figure 1:	Iconicity rating for Bliss and Glyphs.....	50
	<i>Iconicity in English and Northern Sotho.....</i>	50
Figure 2:	Iconicity ratings for the different word categories.....	50
	<i>Appendix A: Descriptions and regulation of Bliss symbols used during training.....</i>	50
Figure 3:	The performance of Group 1 and Group 2 on Blissymbols and CyberGlyphs.....	61
	<i>Performance in English and Northern Sotho.....</i>	61
Figure 4:	Percentage of errors on nouns for Bliss and Glyphs.....	65
	<i>Appendix C: Test results of the 100 words used during training.....</i>	65
Figure 5:	Percentage of errors on verbs for Bliss and Glyphs.....	66
	<i>Appendix D: Test results of the 100 words used during training.....</i>	66
Figure 6:	Percentage of errors on adjectives for Bliss and Glyphs.....	66
	<i>Appendix E: Test results of the 100 words used during training.....</i>	66
Figure 7:	Percentage of errors on prepositions for Bliss and Glyphs...	67
	<i>Appendix F: Test results of the 100 words used during Blissymbol training.....</i>	67
Figure 8:	Percentage of errors on pronouns for Bliss and Glyphs.....	67
	<i>Appendix G: Iconicity ratings for individual words.....</i>	67
	<i>Appendix H: Procedure used with presentation of symbols during training.....</i>	67
	<i>Appendix I: Test results and percentage of errors.....</i>	67

LIST OF APPENDICES

Appendix A: Instructions and description of action- and adjective indicators in English and Northern Sotho.....	83
Appendix B: Description and translation of Blissymbols used during training in English and Northern Sotho.....	84
Description and translation of CyberGlyphs used during training in English and Northern Sotho.....	93
Appendix C: Instructions before testing.....	101
Appendix D: Instructions for Withdrawal 1 and Withdrawal 2 stages....	102
Appendix E: Paragraphs 1 – 4 (English and Northern Sotho versions....	103
Appendix F: Explanatory pictures used during Blissymbol training.....	107
Explanatory pictures used during CyberGlyph training....	109
Appendix G: Iconicity ratings for individual words.....	111
Appendix H: Procedure used with presentation of symbols during training during training.....	115
Appendix I: T-test results and percentage of errors.....	117