

**VERBAL SOLUTIONS
OF
RURAL ZULU-SPEAKING CHILDREN
TO
PROBLEMS ENCOUNTERED IN EVERYDAY LIFE**

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	i
ACKNOWLEDGEMENT OF FUNDING	iii
ABSTRACT	iv
LIST OF TABLES	v- vii
LIST OF FIGURES	viii
ILLUSTRATIONS	ix - xii
CHAPTER 1: ASSESSING THINKING FOR LEARNING - IMPLICATIONS FOR RURAL SOUTH AFRICA	
1.1 INTRODUCTION	1
1.2 CLARIFICATION OF TERMINOLOGY	4
1.3 ABBREVIATIONS	6
1.4 BRIEF OUTLINE OF CHAPTERS	7
1.5 SUMMARY	8
CHAPTER 2: THEORETICAL ISSUES RELATED TO THINKING SKILLS, LANGUAGE AND COGNITION & THE INFLUENCE OF CULTURE AND DISADVANTAGE	
2.1 INTRODUCTION	9
2.2 CULTURE, LANGUAGE AND COGNITION	11
2.3 COGNITIVE STYLE, LANGUAGE AND COGNITION	13
2.4 THE ORAL TRADITION, LANGUAGE AND COGNITION	16
2.5 LEARNING, LANGUAGE AND COGNITION	18
2.6 DISADVANTAGE, LANGUAGE AND COGNITION	21
2.7 EXPLANATIONS, LANGUAGE AND COGNITION	25
2.7.1 Thinking skills and explanation	26
2.7.2 A psycholinguistic framework for understanding explanations	26
2.7.3 A narrative framework for understanding explanation	29
2.7.4 Developmental aspects of explanation	31
2.7.5 Explanation as a production exercise	36

2.7.6	Pragmatic versus logico-deductive explanations	37
2.8	VERBAL PROBLEM SOLVING SKILLS AND THEIR RELATIONSHIP TO THINKING	38
2.9	SUMMARY	44

**CHAPTER 3: THEORETICAL ISSUES RELATED TO CROSS-CULTURAL
EVALUATION AND DEVELOPMENT OF 'NON-BIASED' TEST MATERIAL**

3.1	INTRODUCTION	46
3.2	PERSPECTIVES ON 'NON-BIASED' ASSESSMENT	47
3.2.1	Criteria for a 'non-biased' test	49
3.3	THEORETICAL CONSTRUCTS AND MODELS IN THE DEVELOPMENT OF A 'NON-BIASED' TEST	51
3.4	FACTORS TO CONSIDER IN THE DEVELOPMENT OF A NON-BIASED TEST ..	54
3.4.1	Test Translation	55
3.4.2	Adaptation of content	57
3.4.3	Adaptation of stimuli	58
3.4.4	Adaptation of presentation methods	58
3.4.4.1	Attitude of the tester	59
3.4.4.2	Race of the tester	59
3.4.4.3	Experience of the tester in administering psycho-educational tests	59
3.4.4.4	Effective use of probes in testing	60
3.4.4.5	Method of elicitation and type of response required	61
3.4.4.6	Use of training items	62
3.4.4.7	The social environment of testing	62
3.5	DIFFERENT WAYS OF EVALUATING VERBAL PROBLEM SOLVING SKILLS .	63
3.6	TOWARDS A PROTOCOL FOR THE INVESTIGATION OF CHILDREN'S VERBAL SOLUTIONS TO PROBLEMS OF EVERYDAY LIFE	66
3.6.1	Reasons for the selection of the Test of Problem Solving as a model for evaluating verbal problem solving	66
3.6.1.1	Aim of the test	66
3.6.1.2	Content of the test	66

3.6.1.3	Mode of testing	66
3.6.1.4	Cultural adaptability	67
3.6.1.5	Translation	67
3.6.1.6	Ease of administration	67
3.6.1.7	Elicitation of targets	67
3.6.1.8	Non-timed test	67
3.6.2	Limitation of the TOPS as a model for a cross-cultural test of verbal reasoning	68
3.6.2.1	Problem solving versus explanation	68
3.6.2.2	Scoring of linguistic, semantic and concept criteria	68
3.6.2.3	The limitations of a three point scoring scale	69
3.6.2.4	Use of probes	70
3.6.2.5	Culture bound content of the TOPS	70
3.6.2.6	Lack of a training item	70
3.6.2.7	Poor test validity in scoring criteria	71
3.7	TOWARDS A CONCEPTUAL FRAMEWORK FOR THE SCORING OF A 'NON-BIASED' TEST OF ABILITY TO REASON AND EXPLAIN	72
3.8	SUMMARY	76

CHAPTER 4: METHODOLOGY

4.1	INTRODUCTION	77
4.2	AIMS AND SUB-AIMS	78
4.2.1	Main Aim	78
4.2.2	Sub-aims	78
4.2.2.1	Sub-aim 1 (Pre-experimental stage)	78
4.2.2.2	Sub-aim 2 (Experimental stage)	78
4.2.2.3	Sub-aim 3 (Experimental stage)	78
4.3	RESEARCH DESIGN	79
4.3.1	The pre-experimental stage (Sub-aim 1)	81
4.3.1.1	Adaptation of the Test of Problem Solving (TOPS)	81
4.3.1.1.1	The TOPS as a model	81
4.3.1.1.2	Aspects of the TOPS that were adapted	82

4.3.1.2	Pilot study I: The adapted version of the TOPS	85
4.3.1.2.1	Aims of pilot study I	85
4.3.1.2.1.1	Main aim of pilot study I	85
4.3.1.2.1.2	Sub-aims of pilot study I	85
4.3.1.2.2	Subjects of pilot study I	85
4.3.1.2.3	Setting of pilot study I	86
4.3.1.2.4	Procedure for pilot study I	86
4.3.1.2.5	Results of pilot study I	87
4.3.1.3	Pilot study II	88
4.3.1.3.1	Aims of pilot study II	88
4.3.1.3.1.1	Main aim of pilot study II	88
4.3.1.3.1.2	Sub-aims of pilot study II	88
4.3.1.3.2	Subject selection for pilot study II	88
4.3.1.3.3	The test instrument	90
4.3.1.3.3.1	The revised scoring criteria for the TATE-ZC	90
4.3.1.3.4	Procedure for pilot study II	91
4.3.1.3.5	Reliability control measures.....	93
4.3.1.3.6	The results of pilot study II	95
4.3.1.4	Summary of the outcomes for the pre-experimental phase (sub-aim 1) .	100
4.3.2	The experimental stage (sub-aim 2&3): The main study.....	101
4.3.2.1	Aims of the main study	101
4.3.2.2	Selection of subjects for the main study	101
4.3.2.3	Selection of schools for the main study	102
4.3.2.4	Research assistants	103
4.3.2.5	The test instrument used: The Test of Ability to Explain for Zulu-speaking Children (TATE-ZC)	104
4.3.2.6	Equipment	105
4.3.2.7	Procedure for the main study	105
4.3.2.7.1	Subjects in the main study	105
4.3.2.7.2	Data collection	106
4.3.2.7.3	Translation and transcribing of the data	108
4.3.2.7.4	Scoring of scripts	108

4.3.2.7.5	Collection of academic results	109
4.3.2.8	Data analysis and statistical procedures for the main study	109
4.4	SUMMARY	111

CHAPTER 5: RESULTS AND DISCUSSION OF RESULTS

5.1	INTRODUCTION	112
5.2	RELIABILITY AND VALIDITY OF THE TEST INSTRUMENT	113
5.2.1	Item analysis (i)	114
5.2.1.1	Item-test correlation	114
5.2.1.2	Item-scale analysis, for 5 scales (thinking skills) with Cronbach Alpha coefficients	115
5.2.1.3	Inter-scale correlation	123
5.3	RELIABILITY OF THE TEST PROCEDURE	124
5.3.1	Reliability of translators	124
5.3.2	Reliability of scoring procedures	126
5.4	THE RESULTS OF THE ADMINISTRATION OF THE TATE-ZC	127
5.4.1	Analysis of the data	131
5.4.1.1	Significant difference between scores at each age group	131
5.4.1.2	Identification of a particular thinking skill showing high correlation with the test as a whole	134
5.4.1.3	Identification of a developmental process in the development of thinking skills	135
5.4.1.4	Correlation between TATE-ZC scores and academic performance	137
5.4.1.5	Significant difference between scores for gender	140
5.5	OVERVIEW OF THE RESULTS	140
5.6	SUMMARY	141

CHAPTER 6: INTEGRATION OF RESULTS

6.1	INTRODUCTION	142
6.2	THE MEASUREMENT OF THINKING SKILLS	143

6.2.1	A critical look at the results	143
6.2.2	Thinking skills and literacy	145
6.2.3	Analysis of error patterns in the answers presented in the TATE-ZC	146
6.2.4	Thinking skills and academic performance	149
6.2.5	Thinking skills and gender	150
6.2.6	Thinking skills- the source of the problem	150
6.3	SUMMARY	152

CHAPTER 7: CONCLUSION- THE FINAL WORD

7.1	INTRODUCTION	153
7.2	THE ISSUE OF ‘CULTURE FAIR’	153
7.2.1	Is the TATE-ZC in fact, a ‘culture-fair’ and ‘non biased’	153
7.2.2	The three types if intelligence theory	154
7.3	THE PRACTICAL USEFULNESS OF THIS RESEARCH IN TERMS OF INTERVENTION	155
7.4	WHO ARE THE ROLE PLAYERS?	157
7.5	A CRITICAL EVALUATION OF THE STUDY	158
7.6	IMPLICATIONS FOR FURTHER RESEARCH	160
7.7	CONCLUDING STATEMENT – THE FINAL WORD	161
7.8	SUMMARY	161

SUMMARY	162
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OPSOMMING	164
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BIBLIOGRAPHY	166
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APPENDICES	175
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ABSTRACT

A culturally appropriate test, The Test of Ability to Explain for Zulu-speaking Children (TATE-ZC) was developed, to measure verbal problem solving skills of rural, Zulu-speaking, primary school children (7-12 years). The research aims to investigate the extent to which verbal problem solving skills are developing, in relation to the cognitive demands made, as a child progresses through school. The TATE-ZC evaluates five thinking skills, viz. ability to explain an inference, to determine a cause, to answer a question in the 'negative why' format, to determine a solution and to explain how to avoid a problem. These thinking skills were identified as valid measures of verbal problem solving in the Test of Problem Solving (TOPS) (Zachman, Jorgensen, Huisingh and Barret, 1984), which was used as a basic model for the TATE-ZC. The test consists of 15 line-drawn illustrations and 50 questions, plus one training item. All 50 questions are administered to each child. There are 10 questions for each of the five thinking skills, which are randomly presented throughout the test. Each answer is evaluated according to a set of guidelines and examples given for each score of 0-4. A test total out of 200 is then calculated as a percentage. Two pilot studies were carried out to ensure the validity and reliability of the test. In the main study, The TATE-ZC was administered to six groups of children (N=292) in The Valley of a Thousand Hills, Kwa-Zulu Natal, South Africa, from grade 2 - 7, with a fairly equal gender distribution. Results of the study indicated, that although mean scores revealed an increase in performance with maturity, statistically significant development in thinking skills did not occur on an annual basis, and that in some instances, development only took place after three years (Scheffe's Test $p < .05$). This was particularly true for children 10-12 years. The boys were also shown to perform better than the girls in the majority of instances. This research demonstrates, that lack of adequate thinking skills for learning, could be a significant contributing factor to poor academic performance for rural South African children.

KEY TERMS: Abstract thinking skills; Cognitive style; Cognitive skill; Concrete thinking skills; Cross-cultural setting; Culture; Explanation; Literacy Experience; Non-biased assessment; Problem solving; Second stage language development; Social or Pragmatic reasoning

LIST OF TABLES

Table 2.1	Bernstein: Public and formal language (adapted from Edwards 1979, p34)	23
Table 2.2	Summary of Donaldson's (1986) content/mode and relationships expressed as a reference for a criterion –based scoring system	28
Table 2.3	Developmental trends in the comprehension of complex events (Van den Broek, 1997, p 335)	35
Table 2.4	Explaining inferences: An analysis of linguistic and cognitive skills	42
Table 2.5	Determining Cause: An analysis of linguistic and cognitive skills	42
Table 2.6	Negative Why: An analysis of linguistic and cognitive skills	43
Table 2.7	Determining solutions: An analysis of linguistic and cognitive skills	43
Table 2.8	Avoiding the Problem: An analysis of linguistic and cognitive skills	44
Table 3.1	A summary of scoring criteria, theoretical frameworks and allocated scores	75
Table 4.1	Summary of research methodology	80
Table 4.2	Procedure for the adaptation of content	83
Table 4.3	A representation of the 4 stages followed in the translation Procedure	84
Table 4.4	Subjects in pilot study I	86
Table 4.5	A representation of the results of pilot study I in terms of the 5 sub-aims outlined	87
Table 4.6	The subjects in pilot study II	87
Table 4.7	Description of steps taken in the selection of subjects	90
Table 4.8	Results of the t-test for paired samples. Calculated to measure significance of correlation in a test-retest reliability trial (N=9)	97
Table 4.9	Inter-translator reliability calculated as a percentage	97

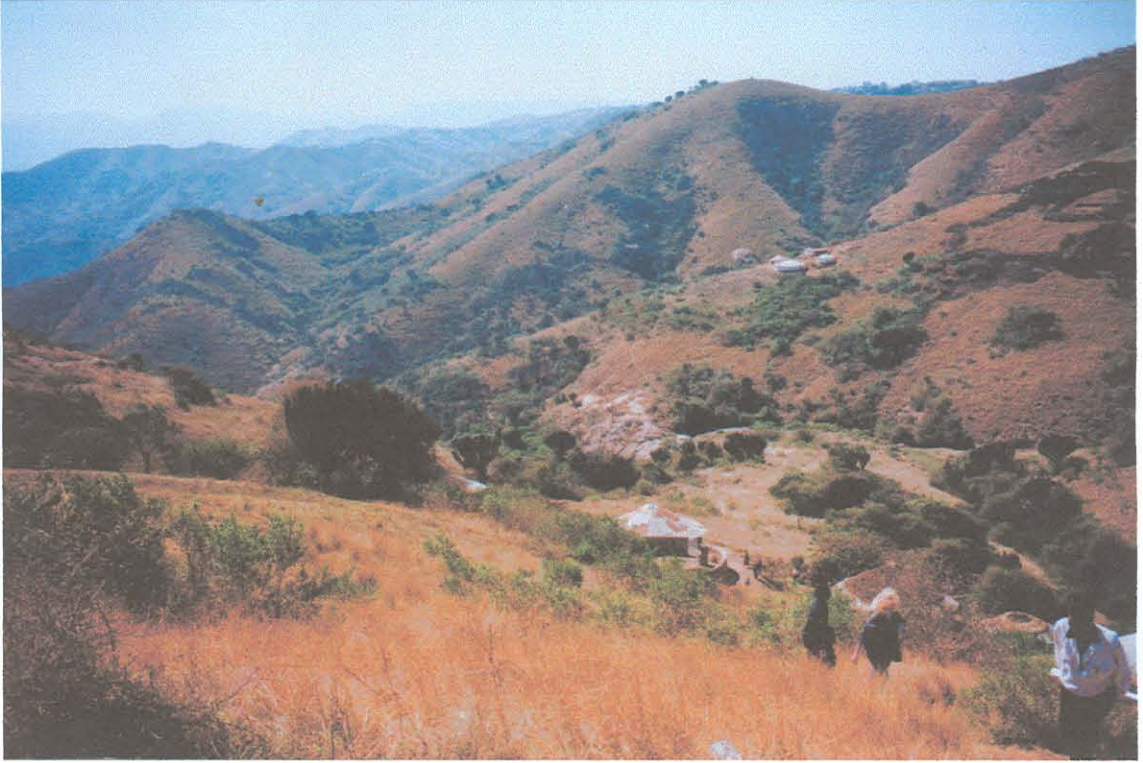
Table 4.10	Reliability for the consistency of probing, calculated as a % Across 3x 2hour time slots, for each age group and for the total sample	99
Table 4.11	Pearson's correlation coefficient in which inter-scorer reliability for scorer 1 (S1) and scorer 2 (S2) was measured for the total scores and for each of the sub-test scores	99
Table 4.12	Summary of outcomes for the pre-experimental stage	100
Table 4.13	Selected schools and pupil:teacher ratios	102
Table 4.14	Description of the five thinking skills (TOPS, 1984)	104
Table 4.15	Subjects in the main study	105
Table 4.16	Distribution of subjects per school	106
Table 4.17	Table of statistical procedures used in the experimental stage	110
Table 5.1	Results of item-test correlation for the group as a whole	114
Table 5.2	Item-scale correlation per age group and for the total group for the scale explaining inferences	117
Table 5.3	Item-scale correlation per age group and for the total group for the scale determining cause	119
Table 5.4	Item-scale correlation per age group and for the total group for the scale negative why questions	120
Table 5.5	Item-scale correlation per age group and for the total group for the scale determining the solution	121
Table 5.6	Item-scale correlation per age group and for the total group for the scale avoiding the problem	123
Table 5.7	Pearson inter-scale correlation for the group as a whole (N=292)	124
Table 5.8	Results from the Friedman Procedure for inter-translator Reliability	125
Table 5.9	Qualitative analysis of translator differences	125
Table 5.10	Pearson's correlation coefficient for the reliability of scoring	126
Table 5.11	Criterion-based evaluation indicators from the TATE-ZC	127
Table 5.12	Ages and grades reflecting significant difference for the five scales and total score	132
Table 5.13	Mean scores as percentages for the total group and per age group for each thinking skill and the test as a whole	133

Table 5.14	Correlation between scores per scale and for the total test for the whole group (N=292)	134
Table 5.15	Ranked order of mean scores for the different thinking skills	135
Table 5.16	Inter-scale correlation for developmental order for thinking skills	136
Table 5.17	Integration of ranked order and inter-scale correlation for developmental order in thinking skills	137
Table 5.18	Correlation of TATE-ZC scores with academic performance using Spearman Correlation coefficient	139
Table 5.19	ANOVA measures of significant difference for gender	140
Table 6.1	Comparison of the TATE-ZC and TOPS scores for the test as a whole	143
Table 6.2	Application of categories and subcategories of error sources in the TATE-ZC	147
Table 6.3	Relationship between information processing features of field dependent thinkers, and error patterns for the TATE-ZC	151

LIST OF FIGURES

Figure 3.1	Representation of the model of the three types of intelligence (Carlson and Wiedl, 1992)	53
Figure 5.1	Eight areas of analysis of data described in sub-aim 3 (experimental stage)	113
Figure 5.2	Mean scores per age and scale	128
Figure 5.3	Scores per age for the total group	128
Figure 5.4	Explaining Inferences- age and score	129
Figure 5.5	Determining Cause- age and score	129
Figure 5.6	Negative Why- age and score	129
Figure 5.7	Determining solutions- age and score	130
Figure 5.8	Avoiding the problem - age and score	130
Figure 5.9	Total Score – age and score	130

**KWADEDAGENDLALE,
Valley of a Thousand Hills, KwaZulu-Natal,
South Africa**

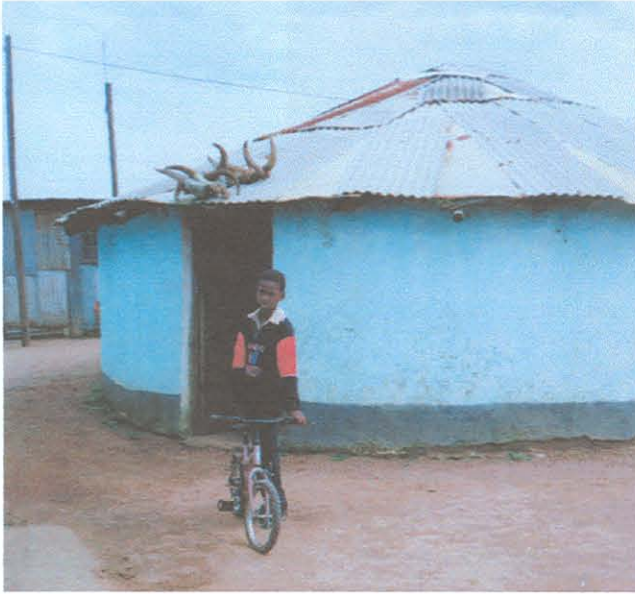


The dry, dusty winters.



The hot, wet summers.

Where the children live:



Some homes are traditional

Some are western

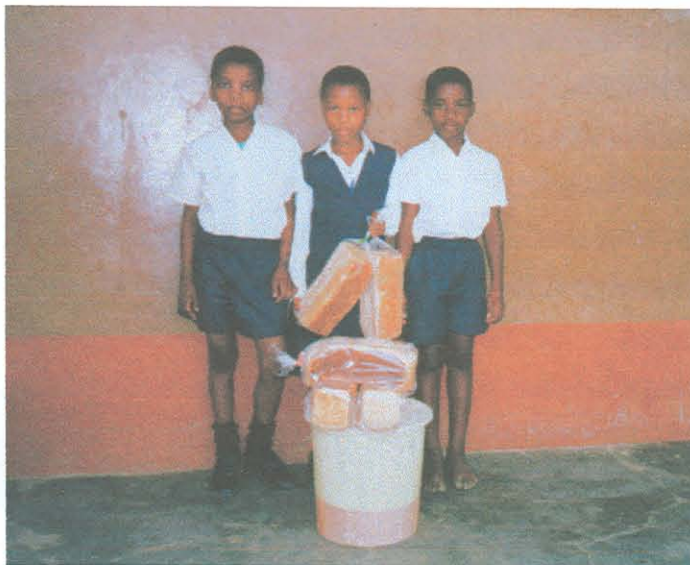


Thandi and her family,
and all the toys they
have

Where the children learn:



Classroom settings



Nutritional supplementation at school

Testing the children:



In the Staffroom



The most suitable spot, where there is no Staffroom