

# An analysis of four variables in a Xhosa communicative test for senior L2 pupils\*

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This article analyses the results of a Xhosa communicative language test described in a previous article (Gxilishe 1987) against the background of four variables – the sex and home language of the testees, the grade (level) on which they took Xhosa at school, and the area in which the particular schools were located. The author also compares the test results with those obtained in the oral examinations administered at school as part of the Cape Senior Certificate Examination.

Hierdie artikel ontleed die resultate van 'n kommunikatiewe taaltoets in Xhosa wat in 'n vorige artikel (Gxilishe 1987) beskryf is teen die agtergrond van vier veranderlikes – die geslag en huistaal van die getoetsdes, die graad waarop hulle Xhosa op skool geneem het en die gebied waarin die spesifieke skole geleë is. Die skrywer vergelyk ook die toetsuitslae met dié behaal in die mondelinge eksamens van die skool as deel van die Kaapse Senior Sertifikaat-eksamen.

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In a previous article (Gxilishe, 1987) a communicative test in Xhosa for second language pupils was described. This test was designed to ascertain whether the objectives of the Cape Departmental syllabus had been attained and was first subjected to evaluation in a trial run to determine the level of validity, reliability and practicability. Once it had been established that the level was acceptable, the test was administered to Senior Certificate pupils in schools in three areas, the Western Cape (Area 1), Port Elizabeth-Uitenhage (Area 2) and Border (Area 3), under the Cape Department of Education.

The aim of this article is to

- present the test results against the background of four variables which may have affected the scores gained by the testees, namely, sex, home language, the grade on which Xhosa had been taken at school and the area in which the school was located
- explain discrepancies with regard to sample and data
- compare the test results with those obtained by the same testees in the school-administered oral examinations and in the Cape Senior Certificate Examination, 1985.

## Sex

Research indicates that sex determines the extent to which oral performance affects achievement (see

\* From: Gxilishe, D.S. 1987. *Oral proficiency in Xhosa as a second language*. University of Stellenbosch D.Litt. dissertation. Promoters: Prof. J.A. du Plessis (Department of African Languages) and Dr. J.J. Botha (Institute for Language Teaching).

McGuiness and Pribram 1978; Powell 1979 and Liski and Puntanen 1983).

Liski and Puntanen (1983) undertook a study aimed at determining the extent to which oral performance in spoken English is affected by variables which have been found to be related to achievement in group conversation tests of English as a foreign language. In this study, sex proved to be one of the most important variables in explaining differences in language skills. Liski and Puntanen point out that systematic differences were found between males and females in their data. Comparison between the girls' and the boys' distribution of marks revealed that the girls in their study were better than the boys at matriculation level (Liski and Puntanen 1983:239).

Evidence exists of male superiority in spatial ability, i.e. in activities in which the ability to organise and relate visual inputs in spatial context is uppermost (Hutt 1972 and Maccoby and Jacklin 1974).

The role expectation of boys in their future life as husbands/providers may direct them to mainly instrumental choices regarding their subjects of study for examination purposes. The practical aspect of the sciences and their direct relevance to career, or even job prospects, lends importance to them in the eyes of young males, but the same cannot be said of languages.

The present study supports Powell (1979) concerning the performance of girls as opposed to boys. He points out that international studies for the evaluation of educational achievement in both French and English as a foreign language showed that girls perform better universally. He also points out that more girls than boys study languages to examinable levels.

According to Powell (1979) international tests in modern language achievement carried out at the same time as those for science have provided ample data for researchers to be able to conclude not only that second language learning is a "feminine" activity in terms of numbers and attitude but that girls excel in terms of overall attainment. Just as boys are superior to girls in measurement of spatial ability, so girls excel in virtually all aspects of the linguistic process (Powell 1979:22).

Studies conducted by McGuiness and Pribram (1978) suggest fundamental differences between the sexes in certain psycholinguistic and neurological activities. They conducted an experiment in which male and female students aged 18-21 were tested on visual and auditory search tasks, requiring them to locate either a target letter or a target sound. While the men in the experiments performed comparatively well in tasks in which a word was presented visually, in purely auditory tasks the women showed a marked tendency to respond faster in all tests; in matching sounds to words they were vastly superior. The data specifically indicated that the commonly found inability to spell is entirely due to incorrect perception of an auditory signal and an inability to form or assess a visual representation while operating in an auditory mode.

However, Powell and Littlewood (1982:155) warn that overt labelling of languages as "female" activities may deter yet more male students from opting to study languages augmenting educational and vocational arguments and independent of social pressures.

### **Home language**

South Africa has a wide variety of languages, dialects and linguistic communities, but only two official languages, English and Afrikaans. There are various immigrant languages which are spoken in addition to the official languages.

The impact of the linguistic situation on education, administration, official policy, indeed on every aspect of day-to-day life is felt by everyone in the country. As far as education is concerned, for instance, pupils in schools which fall under provincial departments of education have to be taught through the medium of either English or Afrikaans. In most instances, the language of instruction is also taught as a mother tongue. The other language (Afrikaans or English) is compulsory and is taught as a second language.

The selection of home language as a variable was made to establish whether there is any statistically significant difference between English-speaking and Afrikaans-speaking pupils in their level of Xhosa oral proficiency.

The following table shows that in total there are more English-speaking people in the three areas studied, than Afrikaans-speaking.

**TABLE 1 Population distribution of English- and Afrikaans-speaking people in the Western Cape, Port Elizabeth–Uitenhage and Border**

Population	Western Cape		P.E.–Uitenhage		Border		TOTAL
	N	%	N	%	N	%	
English-speaking	266 066	64,17	77 511	45,92	55 802	79,58	399,379
Afrikaans-speaking	148 559	35,83	91 298	54,08	14 318	20,42	254 179
<b>TOTAL</b>	<b>414 625</b>	<b>100,00</b>	<b>168 809</b>	<b>100,00</b>	<b>70 120</b>	<b>100,00</b>	

Based on 1980 Census

**Grade**

Differentiation between Xhosa Higher Grade and Xhosa Standard Grade occurs only with regard to the examination, which provides for a choice between the number of books and therefore in the answering of questions on the prescribed literature (The Education Gazette 1982:87).

As far as standards are concerned, the Higher Grade syllabus ought to set higher requirements than Standard Grade, in other words, the Higher Grade should require greater insight into language, a higher level of language skills, a more extensive vocabulary than Standard Grade does. Based on the above differentiation, the possibility exists that pupils doing Xhosa on the Higher Grade may perform better than those doing it on the Standard Grade. This assumption may be based on academic ability. It is also likely that pupils who take Xhosa on the Higher Grade may have an aptitude for it. It is also possible that they may have spoken it from childhood, having grown up amongst Xhosa-speaking people.

**Area**

It is possible that in an area where the majority of the population speak the target language, this may have a positive influence on the learners of that language. Since exposure is a major factor in the effective acquisition of a language, one could therefore expect pupils who may be more exposed to the target language to obtain better scores in the Xhosa communicative test. The assumption is that the smaller the social distance between the two groups, the easier it will be for the members of the second language group to acquire the target language (Schumann 1976, Rivers 1983).

The following table shows the total population distribution in the three areas categorised according to language population residing in the Western Cape, Port Elizabeth–Uitenhage and Border.

**TABLE 2 Population distribution according to language groups, in areas of the Western Cape, Port Elizabeth–Uitenhage and Border based on the 1980 census**

Population	Western Cape		P.E.–Uitenhage		Border	
	N	%	N	%	N	%
English-speaking	266 066	45,60	77 511	14,96	55 802	32,72
Afrikaans-speaking	148 559	25,46	91 298	17,61	14 318	8,40
Xhosa-speaking	168 872	28,94	349 509	67,43	100 394	58,88
<b>TOTAL</b>	<b>583,497</b>	<b>100,00</b>	<b>518,318</b>	<b>100,00</b>	<b>170,54</b>	<b>100,00</b>

Census 80 (1985)

This table shows that in all the areas except in the Western Cape, Xhosa-speaking people are in the majority. By virtue of their numbers, they may have a positive linguistic influence on both English-speaking and Afrikaans-speaking residents of Port Elizabeth–Uitenhage and Border.

**Distribution of pupils according to selected variables**

A total of 159 out of 193 pupils, 126 Higher Grade, and 33 Standard Grade, who were doing Xhosa as a subject for Senior Certificate at the various schools under the Cape Department of Education in the three areas covered, were tested in this study. Therefore an almost full sample (82,38%) of the total number of pupils taking Xhosa at Senior Certificate level during 1985 was incorporated in the study. Only those schools identified by the Department were involved. At some schools visited there were pupils who could not be tested because they were not present on the day on which the test was administered. The total percentage of pupils not tested was 17,62% of the population, and that of the schools not visited was 18,72% of all the schools which offered Xhosa during 1985. Therefore the sample applied in this study is a highly representative one.

**TABLE 3 Pupils according to selected variables  
(Summary Table)**

<b>Variable</b>	<b>No of Pupils</b>	<b>Percentage</b>
Area 1	91	57,2
2	44	27,7
3	24	15,1
<b>TOTAL</b>	<b>159</b>	<b>100,0</b>
Sex Male	70	44,0
Female	89	56,0
<b>TOTAL</b>	<b>159</b>	<b>100,0</b>
Home language Afrikaans	57	35,8
English	97	61,0
<b>TOTAL</b>	<b>159</b>	<b>100,0</b>
Grade Higher	126	79,2
Standard	33	20,8
<b>TOTAL</b>	<b>159</b>	<b>100,0</b>

The figures presented in Table 3 show that more than half of the pupils were from the Western Cape. Furthermore, 56% of the pupils were female and 61% were English-speaking. Nearly 80% of all the pupils studied Xhosa on the higher grade.

**Differences in test scores according to selected variables**

**Area**

Earlier it was suggested that it is possible that in an area where the majority of the population speak the target language, this may have a positive influence on the acquisition of that language. It was also argued that exposure to the target language is a major factor in the effective learning of a language.

Arising from these postulations, the question was asked to what extent pupils from areas where Xhosa is a dominant language will gain higher scores than those from areas where the target language is not a dominant language. These were pupils who were located in Port Elizabeth–Uitenhage and Border, in relation to those who were in the Western Cape.

Since area is associated with language exposure in this study, it will be retained as a constant variable. It is regarded as an extraneous factor. However, it is argued that if area is indeed a major factor in the acquisition of Xhosa by pupils, it will override all the other variables – sex, home language and grade.

As stated earlier, the present study was conducted in three areas, Western Cape, Port Elizabeth–Uitenhage and Border (referred to as areas 1, 2 and 3 respectively).

The following table shows the population figures in these areas.

**TABLE 4 Population distribution of the Western Cape, Port Elizabeth–Uitenhage and Border based on population census of 1985\***

Population	Western Cape		P.E.–Uitenhage		Border	
	N	%	N	%	N	%
Blacks	255 152	8,22	300 019	46,00	364 385	76,86
Whites	435 860	14,04	173 902	26,67	77 905	16,43
Coloureds	2 398 489	77,28	170 790	26,19	29 018	6,12
Asians	14 366	0,46	7 415	1,14	2 791	0,59
<b>TOTAL</b>	<b>3 103 867</b>	<b>100,00</b>	<b>652 126</b>	<b>100,00</b>	<b>474,099</b>	<b>100,00</b>

\* Based on figures supplied by Statistiese Nuisberig (1985) and Graaff (1986).

The above table indicates that in both the Port Elizabeth–Uitenhage and Border areas, the majority of people are black: 46,0% and 76,86% respectively. In the Western Cape, blacks are in the minority (8,22%). If it is true that in an area where the majority of the population speak the target language, this may be a contributing factor in effective language learning of the target language, it can be expected that pupils learning Xhosa located in Port Elizabeth–Uitenhage and Border may gain higher scores than those who are in the Western Cape.

In the following tables the average percentage scores obtained by pupils in each of the areas are shown, as well as calculated differences between the three groups.

**TABLE 5 Average percentage scores according to area of pupils doing Xhosa for Senior Certificate in three areas, namely Western Cape, Port Elizabeth–Uitenhage and Border**

Area Test	Western Cape N=91	P.E.–Uitenhage N=44	BORDER N=24
Listening	60,2	67,2	68,1
Functions	40,5	44,9	43,6
Notions	38,3	48,1	47,1
Free Conversation	52,5	49,5	55,0
<b>TOTAL Test</b>	<b>48,5</b>	<b>51,7</b>	<b>53,6</b>

**TABLE 6 Statistically calculated differences in scores in areas according to p-Values based on T-Tests**

Test Area	Listening	Functions	Notions	Free Conversation	TOTAL N=159
1–2	0,034	0,150	0,017*	0,099	0,146
1–3	0,037	0,275	0,053	0,170	0,070
2–3	0,440	0,417	0,444	0,076	0,354
1–2+3	0,017*	0,153	0,012*	0,314	0,084
2–1+3	0,099	0,188	0,058	0,090	0,265
3–1+2	0,116	0,384	0,173	0,126	0,154

\* Significant at  $p=0,025$  (one-tailed testing)

The table above shows comparisons based on t-test measures of significance of difference between means. These comparisons seem to indicate that area did not have a great influence on second language acquisition. There appears to be no significant difference between scores obtained by pupils in the Western Cape and those in Port Elizabeth – Uitenhage and Border. The non-existence of this influence is shown when comparisons are made on total mean scores of the test for all possible combinations of comparisons. When sub-sections of the test are considered, statistically significant differences are observed in the cases of the tests on listening comprehension and language notions.

From these observations it seems that the area where the pupil is schooled does not make any statistically significant difference in his/her overall score in the test. There is however a significant difference with regard to listening comprehension and notions.

**Sex**

It has been suggested that females tend to obtain higher scores than males in languages. It will now be established how valid the above contention is in a situation where Xhosa is learnt. The following tables show average percentage scores obtained in respect of sex by pupils doing Xhosa for Senior Certificate under the Cape Department of Education as well as differences in these scores between females and males.

**TABLE 7 Average percentage scores according to sex as obtained by pupils doing Xhosa for Senior Certificate under the Cape Department of Education**

Test	Females N=89	Males N=70
Listening	65,6	60,4
Functions	45,3	38,3
Notions	44,5	39,6
Free Conversation	54,5	49,0
TOTAL TEST	52,7	46,9

**TABLE 8 Differences in scores according to Sex, obtained by pupils doing Xhosa for Senior Certificate under the Cape Department of Education, *p*-values based on T-Tests**

Sex	Listening	Functions	Notions	Free Conversation	TOTAL Test
Male/Female	0,059	0,032	0,114	0,003*	0,014*

\* Significant at *p*–0,025 (one-tailed testing)

Table 7 shows that females obtained higher average percentage scores when scores of the whole test battery were combined and also when individual scores of subsections of the test were observed. When differences were calculated as in Table 8, a statistically significant difference was observed in respect of scores obtained in the combined scores and also in the subtest on unstructured free conversation.

The difference observed in respect of the section on free conversation and also on combined scores of the test battery is important, since more marks (35,8%) were allocated to free conversation than to the other three remaining sections of the test battery, the subtests on listening comprehension, language functions and language notions, each being allocated 21,4%.

The subtest on free conversation is important in another respect. To perform well in it one has to be competent in language functions as well as in language notions, which are both important in the language communication process.

From the above observations it appears that findings based on a literature survey that sex influences second language acquisition may be valid and that they relate to the present study as well. This is supported by the fact that there was a statistically significant difference between the performance of females and males in important sections of the Xhosa communicative test.

**Home language**

It has been argued that there may be a difference between the scores obtained by English and Afrikaans pupils doing Xhosa for Senior Certificate under the Cape Department of Education.

The following tables indicate average percentage scores obtained by English-speaking pupils and Afrikaans-speaking pupils as well as differences in scores between the two language groups.

**TABLE 9 Average percentage scores according to home language obtained by Afrikaans-speaking and English-speaking pupils doing Xhosa in the Cape Department of Education.\***

Test	Afrikaans N=57	English N=97
Listening	55,5	67,1
Functions	35,6	45,5
Notions	32,1	47,5
Free Conversation	47,1	54,8
TOTAL TEST	43,3	53,6

**TABLE 10 Differences in scores according to home language, *p*-values based on T-Tests**

Home language	Listening	Functions	Notions	Free Conversation	TOTAL Test
Afrikaans-English	0,000*	0,005*	0,000*	0,000*	0,000*

\* Significant at *p*-0,025 (one-tailed testing)

† Five testees were discarded because they represented a small group of pupils who spoke other languages namely, Portuguese, German and Dutch.

Tables 9 and 10 show that some of the factors favouring English-speaking pupils may be true because average percentage scores obtained by English-speaking pupils were greater than those obtained by those whose mother tongue was Afrikaans. The differences between the two population groups were statistically significant in all the subsections of the test.

**Grades**

Earlier it was postulated that it is possible that pupils doing Xhosa Higher Grade may perform better than those doing Xhosa Standard Grade. This assumption was based on the likelihood of higher academic ability.

The following tables show average percentage scores obtained by pupils in the Higher Grade and the Standard Grade as well as differences in these scores.

**TABLE 11 Average percentage scores according to grades**

Test	Higher Grade N=126	Standard Grade N=33
Listening	62,8	65,4
Functions	44,2	34,6
Notions	42,9	40,4
Free Conversation	52,8	49,1
TOTAL TEST	50,9	47,2

**TABLE 12 Differences in scores according to grades, p-values based on T-Tests**

Grades	Listening	Functions	Notions	Free Conversation	TOTAL Test
Higher-Standard	0,267	0,018*	0,312	0,060	0,123

\* Significant at  $p=0,025$  (one-tailed testing)

Table 11 indicates that scores obtained by pupils doing Higher Grade and Standard Grade did not differ significantly except in respect of the subsection on language functions.

In Table 12 the supposition that pupils studying Xhosa on the Higher Grade may perform better than those doing it on the Standard Grade is largely refuted. It is noted however, that there is a statistically significant difference with regard to language functions. Pupils in the Higher Grade may have found language functions easier, or perhaps there was more attention paid to them in class in the Higher Grade. It is also possible that pupils in the Standard Grade may have found the language functions difficult to understand.

**Summary**

On the basis of this study the following pattern emerged. When average percentage scores obtained by pupils in the three areas of the Western Cape, Port Elizabeth-Uitenhage and Border were compared with one another, the area where the pupil was schooled did not make any statistically significant difference to his overall score in the test. A difference was, however, noticed with regard to listening comprehension and notions.

There was a statistically significant difference in the performance of females and males in important sections of the Xhosa communicative test.

Average percentage scores obtained by English-speaking pupils were higher than those obtained by Afrikaans-speaking pupils. There were statistically significant differences in all the subsections as well as the total score.

Scores obtained by pupils both on the Higher Grade and Standard Grade did not differ significantly except in the subsection on functions. Grade does not make any statistically significant difference in the overall score in the test.

**Language exposure**

It was stated earlier that language exposure is an important aspect of language learning. Several levels of language input can be discerned in language learning. The language classroom, for example, provides a specialised kind of exposure to the target language. Encountering the language through books or through the environment is another form of exposure. Language exposure is an important way of improving proficiency by increasing the learner’s experience with forms and meanings that can be incorporated into his own use of the language. Since exposure does not necessarily highlight new forms or meanings, these are likely to be implicitly acquired and may be used by the learner to form his own responses in the target language (Bialystok 1978).

Since formal instruction, because of time constraints, does not allow much practice of new language concepts, additional practice is necessary if the learner is completely to acquire and retain the feature system of a new language concept. This practice has to be acquired outside of formal instruction but will perhaps be built on what is acquired within a formal instructional framework.

It sometimes happens that some learners, for certain reasons, are able to exploit formal learning environments for extensive practice while others derive only limited benefit from formal instruction. The more one practises, the greater the level of competence.



Seliger (1977:275) states that the term exposure is neutral. He points out that being exposed to a language is not like being exposed to a virus. One does not catch it automatically. Seliger (1977) notes that children seem to catch a first language automatically, but one can hardly imagine a normal child retreating from language interaction.

He classifies learners into two main types.

Active learners who utilise all language environments, both formal and natural, for practice by interacting and getting others to use language with them are termed high input generators. The end result of their behaviour is a competence which develops at a faster and perhaps qualitatively better rate. By getting more focused input, the high input generator is able to test more hypotheses about the shape and use of the second language. Passive learners who do not exploit practice opportunities and retreat from interaction are termed low input generators. This type of learner will avoid intensive contact with the second language. For this reason, the low input generator is heavily dependent on language learning environments such as the classroom which are artificially contrived to force him into contact with the second language.

Because of the limitations of formal learning environments, the low input generator will receive a limited amount of focused input and will not seek out additional practice opportunities when left to his own devices. This avoidance behaviour affects the rate of second language achievement.

The conclusion based on the results of Seliger's study was that high input generators will benefit from formal instruction because they are maturationally able to do so. However, they will also exploit other practice opportunities beyond what is presented formally. Low input generators, on the other hand, do not interact intensively in language classes or outside of language classes. While they too are maturationally capable of benefiting from formal instruction, it appears that they are also dependent on it.

The above argument may be summarised as follows: The learning mechanism operates through the learner's capacity to formulate rules about the language once the individual has been exposed to it. The essential condition is exposure to the language, and as long as this exposure continues the learning mechanism will operate. What is needed in language teaching, therefore, is adequate exposure to the target language (Wilkins 1972:172). The greater the exposure to meaningful language the more effectively the learner can formulate and revise the hypotheses about the structure of the language.

It was argued earlier that if pupils are in areas where the majority of the population speak the target language, it is possible that the pupils will be highly exposed to the language and may acquire a high degree of oral proficiency in it. Area was associated with language exposure. However, this argument was not supported by the data.

### **Relationship between sex and oral proficiency controlled for area**

A variable can be defined as an attribute of a person or an object which "varies" from person to person or from object to object (Hatch and Farhady 1982:12). For example, sex and language group are variables because they vary from person to person.

Variables can be classified as dependent, independent or moderator variables. It is also possible to have intervening and control variables as well. The independent variable is the subject of the investigation. It is the variable which is selected, manipulated and measured.

The dependent variable, on the other hand, is the variable which is observed and measured to determine the effect of the independent variable.

A control variable is a variable which is held constant in order to neutralise the potential effect it might have on behaviour (Hatch and Farhady 1982:14). In determining differences between two or more variables, up to now, two independent variables have been used in each argument. However,

this does not appear to have been enough. A deeper and more accurate understanding of two-variable relationships may be achieved by controlling one or more additional variables.

Area has been held constant as a control variable. The aim of this activity was to establish whether the pattern noticed in the behaviour of sex, home language and grade on the scores would persist. A control variable (area) was used constantly in order to neutralise the potential effect it might have on behaviour. Controlling this variable is important for a fuller, more precise understanding of the original relationship. The use of a control variable (area) is based on the premise that if area has indeed a great influence on oral achievement, there will be no difference in performance between Areas 2 and 3, females and males, Afrikaans-speaking and English-speaking pupils, and between Xhosa Higher Grade and Xhosa Standard Grade. If there is low exposure, the relationships observed above will remain, but where the exposure is high, the relationships are expected to disappear. Therefore intense exposure may result in spurious relationships.

Tables 13 and 14 show mean scores obtained in respect of sex as well as comparisons based on t-test measures of significance between means in the case of each of the three areas.

**TABLE 13 Average percentage scores obtained by females and males in three areas, Western Cape, Port Elizabeth–Uitenhage and Border**

Area	Sex	No.	Listening	Functions	Notions	Free Conversation	TOTAL Test
1	Females	44	61,8	44,8	41,0	55,4	51,3
	Males	47	58,7	36,5	35,8	49,8	45,8
2	Females	26	67,3	44,0	45,9	51,2	52,0
	Males	18	67,2	46,3	51,4	47,2	51,3
3	Females	19	72,4	48,1	50,8	56,8	56,9
	Males	5	51,8	26,6	33,2	48,0	41,0

**TABLE 14 Differences in scores obtained by females and males in three areas, Western Cape, Port Elizabeth–Uitenhage and Border, *p*-values based on T-Tests**

Area	Sex	Listening	Functions	Notions	Free Conversation	TOTAL Test
1	Females-Males	0,217	0,034	0,138	0,006*	0,032
2	Females-Males	0,395	0,393	0,270	0,207	0,455
3	Females-Males	0,055	0,074	0,152	0,155	0,092

\* Significant at  $p=0,025$  (one-tailed testing)

With regard to the relationship between sex and test results (total score) controlled for area, the following can be stated:

- a relationship between sex, free conversation and test results (total score) indicates that females gained higher scores than males (Table 7)
- when controlled for area, (Table 13) the relationship disappeared, i.e. within the various areas, females and males did not differ significantly in total score

This implies that area specifies the conditions that neutralise the capacity of females to perform better on the Xhosa communicative test.

What are these conditions? On examining the relationship between area and test results no relationship was observed between area and total score; a relationship was however noticed between

area and listening comprehension (better scores in areas 2 and 3 combined); and area and language notions (better scores in areas 2 and 3 combined).

Areas 2 and 3 combined thus resulted in increased proficiency in listening comprehension and language notions. This suggests that there was more exposure to the target language, and consequently more input.

It would appear that Areas 2 and 3 are conducive to input but Area 1 is not. This may be because there are more Xhosa-speaking people in Areas 2 and 3 than in Area 1.

It may be argued that when exposure is intense as is indicated in Table 13 the female capacity to learn Xhosa in the case of Areas 2 and 3 may be overridden. It may also be argued that males may be so intensely exposed to the target language that their capacity is on a par with that of the females. On the other hand, it may be argued that both groups become high input generators (Seliger 1977).

As far as Area 1 is concerned, it may be argued that although exposure to the language is minimal, female capacity to acquire Xhosa still functions strongly as is evident in the relationship between sex and free conversation, where females gained higher scores than males (Table 13).

It may be concluded, therefore, that conditions of exposure to the target language which appear to exist in Areas 2 and 3 are likely to have a strong effect on the learning of Xhosa. Because of the intensity of language exposure, they may render the relationship between sex and oral proficiency spurious. This may mean that the innate ability of females to perform better than males may not be the only crucial factor; exposure may also be of fundamental importance.

**Relationship between home language and oral proficiency controlled for area**

The relationship between home language and Xhosa test results was controlled for area.

Table 15 shows the average percentage scores obtained by Afrikaans-speaking pupils as well as English-speaking pupils in the three areas, Western Cape, Port Elizabeth–Uitenhage and Border. Table 16 indicates the differences in scores in areas obtained by English-speaking pupils and Afrikaans-speaking pupils.

**TABLE 15 Average percentage scores obtained by Afrikaans-speaking pupils as well as English speaking pupils in each of the three areas, Western Cape, Port Elizabeth–Uitenhage and Border**

Area	Home Language	No.	Listening	Functions	Notions	Free Conversation	TOTAL Test
1	Afrikaans	24	57,3	38,0	33,3	49,3	45,5
	English	63	60,1	40,6	39,0	53,6	48,9
2	Afrikaans	20	53,2	33,8	31,1	42,4	40,4
	English	23	82,6	57,5	66,8	57,3	64,1
3	Afrikaans	10	56,8	34,0	31,6	52,5	44,9
	English	14	76,2	50,4	58,2	56,8	59,8

**TABLE 16 Differences in scores according to home language in Western Cape, Port Elizabeth–Uitenhage and Border, *p*-values based on T-Tests**

Area	Home Language	Listening	Functions	Notions	Free Conversation	TOTAL Test
1	English–Afrikaans	0,233	0,297	0,102	0,023*	0,124
2	English–Afrikaans	0,000*	0,000*	0,001*	0,000*	0,000*
3	English–Afrikaans	0,010*	0,054	0,005*	0,225	0,018*

\* Significant at percentage *p*–0,025 (one-tailed testing)

When the relationship between home language and oral proficiency was studied, English-speaking pupils obtained significantly higher scores than Afrikaans-speaking pupils in all the sections of the test battery.

However, when controlled for area the relationship was as follows:

- In Area 1 the difference was not significant except in the section of the test on free conversation
- In Area 2 the difference was significant in all the subtests.
- In Area 3 the difference was significant in respect of the sections of the test on listening comprehension, language notions and the average combined score of all the tests.

This suggests that area specifies conditions which may either neutralise or enhance conditions for English-speaking groups to perform better in Xhosa.

It may be argued that the amount of exposure to the target language experienced by both English-speaking and Afrikaans-speaking pupils may have been so small that it placed both groups on an equal level of performance, except in respect of free conversation. In area 1, these conditions were neutralised in the cases of listening, functions and notions.

They were also neutralised in Area 3 in the cases of functions and free conversation.

It would appear that listening comprehension and the acquiring of language functions and notions are important elements in language learning.

It would appear that Area 1 is not conducive to creating these conditions where most language elements for listening, functions and notions can be acquired by the two language groups. It would appear that Area 3 may lack conditions for increasing the capacity to acquire language functions and eventually free communication. It is also possible that pupils enjoy high exposure but are "low input generators".

It may be concluded that the seeming lack of exposure to the target language found in Area 1 and possibly in Area 3 (when the assumption of high and low input generators distinction is disregarded) may result in diminished performance in Xhosa for English-speaking pupils.

**Relationship between grade and oral proficiency controlled for area**

In the following discussion, the relationship between grade and Xhosa test results is controlled for area.

The following table shows the average percentage scores in areas obtained by pupils who take Xhosa on the Higher Grade and on the Standard Grade.

**TABLE 17 Average percentage scores in areas obtained by pupils doing Xhosa on the Higher Grade and on the Standard Grade**

Area	Grade	No.	Listening	Functions	Notions	Free Conversation	TOTAL Test
1	Higher	81	61,5	43,4	40,5	53,0	50,0
	Standard	10	50,0	17,0	21,0	49,0	36,3
2	Higher	31	64,8	44,5	46,2	50,5	51,4
	Standard	13	73,0	46,2	52,7	47,3	52,5
3	Higher	14	66,2	48,0	49,3	57,5	55,4
	Standard	10	71,0	37,0	44,1	51,5	51,1

**TABLE 18 Differences in scores in areas obtained by pupils doing Xhosa on the Higher Grade and on the Standard Grade, *p*-values based on T-Tests**

Area	Grade	Listening	Functions	Notions	Free Conversation	TOTAL Test
1	Higher-Standard	0,051	0,000*	0,002*	0,043	0,000*
2	Higher-Standard	0,148	0,421	0,250	0,220	0,423
3	Higher-Standard	0,298	0,139	0,320	0,132	0,273

\* Significant at percentage *p*-0,025 (one-tailed testing)

When grade and test results were compared the Higher Grade pupils obtained significantly higher scores in the test on language functions.

When the relationship between grade and test results was controlled for area, Higher Grade pupils in Area 1 obtained significantly higher scores in the sections of the test on language functions and notions. The same pupils also showed a significantly higher score in the total score. In Areas 2 and 3 no significant relationship was gained in either of these two grades.

Possible reasons for the performance in Area 1 may relate to the fact that the majority of pupils who take Xhosa in the Western Cape are English speaking (72,4%), and that in the Higher Grade the majority of pupils are English-speaking (64,5%).

Since the test construction did not distinguish between grades no clear conclusion can be drawn. Items were selected in terms of frequency of occurrence only.

### Conclusions

An analysis of the data shows that when considered as a control variable, area influences the performance of pupils. This implies that when pupils are exposed to the target language, they tend to perform better in the communicative test. Lack of exposure (as in Area 1) results in the equalising of that performance when compared in terms of sex and home language.

It has been noted that performance in a target language is influenced by the sex of the pupils learning the language. This has been supported by the finding that females tend to perform significantly better than males in the communicative test.

The above scores also show that home language has an influence on the manner in which pupils performed in the Xhosa communicative test. It has been established that English-speaking pupils performed significantly better than Afrikaans-speaking pupils in all facets of the test even when control for area was instituted.

Grade does not appear to influence performance in the Xhosa communicative test significantly.

### Bibliography

- BIALYSTOK, E. 1978. A theoretical model of second language learning. *Language learning* 28(1) June: 69-83.
- CAPE EDUCATION DEPARTMENT 1982. The Education Gazette of the Provincial Administration of the Cape of Good Hope LXXI (2) 4 February.
- GRAAF, J.F. de V. 1986. *The present state of urbanisation in the South African homelands and some future scenarios*. Occasional Paper No. 11 September: 8-14. Research unit for sociology of development; University of Stellenbosch: Department of Sociology.
- GXILISHE, D.S. 1987. A Xhosa communicative test for senior L2 pupils. *Per Linguam* Vol 3 No 2.
- GXILISHE, D.S. & D.H. van der Vyver. 1987. Language training in industry. *Per Linguam* Special Issue No. 2, 1987.
- HATCH, E. 1978. Acquisition of syntax in a second language. In Richards, J. (ed.). *Understanding second and foreign language learning*. Rowley, MA: Newbury House.
- HATCH, E. & H. Farhady, H. 1982. *Research design and statistics for applied linguistics*. Rowley MA: Newbury House.
- HUTT, C. 1972. *Males and females*. Harmondsworth: Penguin.
- LISKI, E. & S. Puntanen. 1983. A study of the statistical foundations of group conversation tests in spoken English. *Language Learning* 33(2) June: 225-246.
- MacCOBY, E.E. & C.N. Jacklin. 1974. *The psychology of sex differences*. Stanford, CA: Stanford U.P.

- McGUINNESS, D. & K.H. Pribram. 1978. The origins of sensory bias in the development of gender differences in perception and cognition. In Bortner, Turkewitz and Izard (eds.). *Cognitive growth and development – essays in honor of Herbert G. Birch*. New York: Brunner-Mazel.
- POWELL, R.C. 1979. Sex differences and language learning: a review of the evidence. *Audio-visual Language Journal*. XVII(1) Spring: 19-24.
- POWELL, R. & P. Littlewood, P. 1982. Foreign languages: the avoidable options. *British Journal of Language Teaching*. 20(3) Winter: 153-159.
- RIVERS, W.M. 1983. *Teaching of English to Speakers of other languages*. University of Minnesota.
- SCHUMANN, J.H. 1976. Social distance as a factor in second language acquisition. *Language Learning* 25(1): 135-143.
- SELIGER, H.W. 1977. Does practice make perfect? A study of interaction patterns and L2 competence. *Language Learning* 27 (2) December: 263-278.
- WILKINS, D.A. 1972. *Linguistics in language teaching*. London: Edward Arnold.