

- biographical student data
- the students' attitudes to English as a subject in secondary schools (ATE)
- the students' self-concepts of academic ability in English (SAAE)
- the students' perceptions of their teachers of English as a subject (SPT)

In order to test the hypotheses the data was processed using the following statistical techniques and processes (see 4.4): an item analysis, determining the norms (stanines), the t- test, the F- test and the Pearson's product moment correlation coefficient, and a step-wise regression analysis.

4.5.2 Item analysis

The results of the item analysis conducted on each of the three sections of the questionnaire, that is students' attitudes towards English as a subject (ATE), students' self-concepts of academic ability in English (SAAE) and students' perceptions of their teachers of English as a subject (SPT), appear below.

The alpha reliability coefficient was calculated for each of the various sections of the questionnaire in the event that all items were retained and when a specific item was left out. On the basis of the item-total correlation, and alpha reliability coefficient, a decision was made regarding whether or not a specific item ought to be retained or omitted.

In tables 4.6 – 4.8 the results of the item analysis are presented and interpreted.

Table 4.6. Item analysis for attitude towards English (ATE)

	Item correlation with total	Alpha if item is left out
13	0.268	0.771
14	0.286	0.771
15	0.383	0.764
16	0.304	0.769
17	0.351	0.765
18	0.397	0.762
19	0.457	0.757
20	0.490	0.751
21	0.557	0.742
22	0.605	0.735
23	0.336	0.767
24	0.439	0.756
25	0.329	0.767

No.of subjects :	271
No.of items :	13
Alpha reliability coefficient :	0.774
Mean :	43.579
Standard deviation :	5.011

According to the results of the item analysis appearing in table 4.6 all items showed a positive correlation with the total, while the alpha reliability coefficient was not significantly higher if any item was left out. Therefore all the items of this section (B) (ATE) were retained.

Table 4.7 Item analysis for self-concept of academic ability in English (SAAE)

No. of subjects :	271
No. of items :	26
Alpha reliability coefficient :	0.838
Mean :	83.243
Standard deviation :	9.014

Item	Item correlation with total	Alpha if item is omitted
26	0.306	0.835
27	0.296	0.836
28	0.140	0.843
29	0.388	0.833
30	0.415	0.833
31	0.494	0.830
32	0.357	0.834
33	0.515	0.828
34	0.495	0.830
35	0.288	0.836
36	0.434	0.832
37	0.521	0.827
38	0.352	0.834
39	0.451	0.830
40	0.432	0.831
41	0.365	0.833
42	0.371	0.833
43	0.356	0.833
44	0.150	0.842
45	0.289	0.836
46	0.475	0.829
47	0.302	0.835
48	0.399	0.832
49	0.464	0.830
50	0.512	0.828
51	0.450	0.830

According to the results of the item analysis appearing in table 4.7 all items showed a positive correlation with the total, while the alpha reliability coefficient was not significantly higher if any item was left out. Therefore all the items in this section (C) (SAAE) were retained.

Table 4.8 Item analysis for student perceptions of their teachers of English (SPT)

No. of subjects :	271
No. of items :	30
Alpha reliability coefficient :	0.905
Mean :	92.760
Standard deviation :	12.383

Item	Item correlation with total	Alpha if item is omitted
52	0.580	0.900
53	0.581	0.900
54	0.426	0.903
55	0.674	0.898
56	0.170	0.907
57	0.568	0.900
58	0.530	0.899
59	0.530	0.901
60	0.147	0.908
61	0.146	0.907
62	0.505	0.901
63	0.431	0.903
64	0.370	0.904
65	0.522	0.901
66	0.407	0.903
67	0.423	0.903
68	0.531	0.901
69	0.359	0.904
70	0.564	0.901
71	0.436	0.902
72	0.465	0.902
73	0.549	0.900
74	0.336	0.904
75	0.339	0.905
76	0.572	0.900
77	0.673	0.898
78	0.574	0.900
79	0.543	0.900
80	0.593	0.899
81	0.598	0.900

According to the results of the item analysis appearing in table 4.8 all items showed a positive correlation with the total, while the alpha reliability coefficient was not

significantly higher if any item was left out. Therefore all the items in this section (D) (SPT) were retained.

4.5.3 Determining the norms

A norm is an objective standard whereby the scores which a testee receives on a measuring instrument, are interpreted.

Stanines (standard scores divided into nine categories as in table 4.9) were used to determine the norms.

To calculate the stanines for each of the sections of the questionnaire, the cumulative percentages for each of the sections were obtained. The stanines obtained for each section are set out in tables 4.10, 4.11 and 4.12.

Table 4.9 Limits and areas of stanines

Stanines	Limits	% of Area
9	+00 to + 1.75z	4
8	+ 1.75 to +1.25z	7
7	+ 1.25 to 0.75z	12
6	+0.75z to 0.25z	17
5	+0.25z to - 0.25z	20
4	-0.25z to -0.75z	17
3	00.75z to-1.25z	12
2	-1.25z to -1.75z	7
1	-1.75z to- 00	4

(Mulder 1989:205)

**Table 4.10 Transformation of raw scores into stanines
section 1 : attitude towards English**

Raw Score	Frequency	Cumulative Percentage	Stanine
27	1	0.37	1
30	2	0.74	1
31	2	0.37	1
32	2	0.74	1
33	6	2.21	1
34	5	1.85	2
35	3	1.11	2
36	3	1.11	2
37	13	4.80	2
38	8	2.95	3
39	10	3.69	3
40	15	5.54	3
41	21	7.75	4
42	14	5.17	4
43	13	4.80	5
44	23	8.49	5
45	27	9.96	5
46	13	4.80	6
47	19	7.01	6
48	28	10.33	7
49	18	6.64	7
50	12	4.43	8
51	8	2.95	9
52	6	2.21	9

Table 4.11 Transformation of raw scores into stanines
section 2 : self-concept of academic ability in English

Raw Score	Frequency	Cumulative Percentage	Stanine	Raw Score	Frequency	Cumulative Percentage	Stanine
55	2	0.74	1	82	9	44.65	5
59	3	1.85	1	83	13	49.45	5
61	1	2.21	1	84	14	54.61	5
62	1	2.58	1	85	13	59.41	5
65	1	2.95	1	86	12	63.84	6
66	2	3.69	1	87	10	67.53	6
67	1	4.06	1	88	8	70.48	6
68	1	4.43	1	89	10	74.17	6
69	3	5.54	2	90	12	78.60	7
70	3	6.64	2	91	6	80.81	7
71	4	8.12	2	92	6	83.03	7
72	7	10.70	2	93	8	85.98	7
73	11	14.76	2	94	11	90.04	7
74	7	17.34	3	95	5	91.88	8
75	8	20.30	3	96	5	93.73	8
76	5	22.14	3	97	4	95.20	8
77	5	23.99	3	98	3	96.31	9
78	13	28.78	3	100	6	98.61	9
79	9	32.10	4	101	3	99.63	9
80	16	38.01	4	102	1	100.00	9
81	9	41.33	4				

**Table 4.12 Transformation of raw scores into stanines.
section 3: perceptions of teachers of English**

Raw Score	Frequency	Cumulative Percentage	Stanine	Raw Score	Frequency	Cumulative Percentage	Stanine
45	2	0.74	1	91	7	43.17	5
58	1	1.11	1	92	4	44.65	5
60	1	1.48	1	93	6	46.86	5
62	1	1.85	1	94	7	49.45	5
63	1	2.21	1	95	14	54.61	5
64	1	2.58	1	96	9	57.93	5
65	1	2.95	1	97	10	61.62	6
66	1	3.32	1	98	8	64.58	6
67	1	3.69	1	99	8	67.53	6
69	3	4.80	1	100	10	71.22	6
70	1	5.17	2	101	8	74.71	6
72	1	5.54	2	102	14	79.34	7
73	4	7.01	2	103	10	83.03	7
75	2	7.75	2	104	7	85.61	7
76	5	9.59	2	105	7	88.19	7
77	2	10.33	2	106	6	90.41	8
78	4	11.81	2	107	5	92.25	8
79	1	12.18	2	108	1	92.62	8
80	2	12.92	2	109	2	93.36	8
81	6	15.13	3	110	2	94.10	8
82	5	16.97	3	111	1	94.46	8
83	4	18.45	3	112	1	94.83	8
84	12	22.88	3	113	1	95.20	8
85	11	26.94	4	114	6	97.42	9
86	7	29.52	4	115	2	98.15	9
87	8	32.47	4	116	3	99.26	9
88	8	35.42	4	117	1	99.63	9
89	8	38.38	4	120	1	100.00	9
90	6	40.49	4				

Table 4.13 Summarizing the norms

Questionnaire Section	Below average 1 - 3	Average 4 - 6	Above average 7 - 9
ATE	13 - 40	41 - 47	48+
SAAE	26 - 78	79 - 89	90+
PTE	45 - 84	85 - 101	102+

4.5.4 Reliability of the instrument

The closer the reliability of the measuring instrument was to 1, the smaller the difference was between the variance of the true score and the observed score. When an instrument was developed, an attempt was made to ensure that the reliability of the instrument was as close to 1 as possible.

The measuring instrument could only be administered once for practical reasons (the respondents were all due to sit national public examinations), therefore the test re-test method of determining reliability could not be employed. The reliability was therefore arrived at by calculating the alpha reliability coefficient for each of the three sections of the measuring instrument. The results are shown in table 4.14.

Table 4.14 Reliability of the measuring instrument

Section	Alpha reliability coefficient	No. of items
ATE	0.774	13
SAAE	0.838	26
PTE	0.904	30

Table 4.14 shows that the alpha reliability coefficient for section B of the questionnaire is 0.774. For section C it is 0.838, and for section D it is 0.904. If a measuring instrument shows a reliability coefficient of 0.75 or higher (Mulder 1989) it may be deemed a reliable instrument. The measuring instrument used in this study can therefore be considered to be a reliable instrument.

4.5.5 Validity of the instrument

If a test is to be considered valid it has to demonstrate adequate statistical characteristics. Therefore validity is defined as the extent to which a score measures the underlying construct that it claims to measure.

4.5.5.1 Construct validity

Construct validity is demonstrated when two independent but related measures of the same construct are positively correlated.

A questionnaire usually consists of different sub-sections measuring different constructs. The questionnaire relating to this study was also divided into different sub-sections namely: the attitudes school students adopted towards the school subject English, student self-concept of academic ability in English and student perceptions of their teachers of English. Although the questionnaire consisted of different constructs, they were all

related to one another. One would therefore have expected to find significant positive correlations among the constructs (see table 4.15).

The data revealed that attitudes towards English section (ATE), positively correlated with the section student self-concepts of academic ability in English (SAAE) that is 0.421 ($p < 0.01$). The attitude towards English section (ATE) also positively correlated with the section student perceptions of their teachers of English (SPT), that is 0.397 ($p < 0.01$). Finally the sub-section self-concept of academic ability in English (SAAE), correlated positively with the section student perceptions of their teachers of English (SPT) that is 0.457 ($p < 0.01$).

Since the sections correlated significantly and positively with one another, one may consider the questionnaire to be construct valid. See table 4.15 for the correlations.

Table 4.15 Inter -correlation matrix for the three affective factors

(N=271)			
	ATE	SAAE	PTE
ATE	1.000	0.421	0.397
SAAE		1.000	0.457
PTE			1.000

For all correlates $p < 0.01$

The construct validity of the instrument was also confirmed by the fact that the original grouping of items in the different sections of the questionnaire, were confirmed by the item analysis performed in paragraph 4.5.2 (Mulder 1989).

4.5.5.2 Content validity

Content validity involves confidence that the items comprising the measuring instrument are representative of the field which they intend to serve (Mulder 1989).

The measuring instrument used in this study consisted of a three part questionnaire. The first part consisted of thirteen (13) items which purported to measure the attitudes school students have towards the English language (ATE). The second part of the questionnaire consisted of twenty-six (26) items which purported to measure the self-concept of academic ability in English (SAAE). The third part of the questionnaire consisted of thirty (30) items which purported to measure student perceptions of their teachers of English (SPT). Each item of the measuring instrument was carefully selected after being scrutinised by experts in the field (Professor Mellet of UNISA and Professor Chacko of Africa University).

These items were formulated in accordance with the operational constructs that were identified by the literature study in chapters 2 and 3.

4.5.6 Testing the Hypotheses

Hypothesis 1

With regard to hypothesis 1 stated in section 4.4.2.1, the following null hypotheses were tested :-

(a) Hypothesis 1A

There is no significant difference between males and females regarding their mean attitudes towards English (ATE).

To determine whether or not females differed significantly from males in terms of attitudes towards English (hypothesis 1A), the mean of each group was calculated. The t

test was used to determine whether or not the two means differed significantly. The results appear in table 4.16.

Table 4.16 Attitudes towards English of male and female students

Variable	Group	N	Mean (ATE)	S	t-value	Df	p
ATE	Female	134	44.17	4.91	1.93	269	p>0.05
	Male	137	43	5.05			
Total		271					

Interpretation

According to table 4.16 a t- value of 1.93 was obtained with $p>0.05$. Therefore the null hypothesis could not be rejected. There was no significant difference between males and females regarding their mean attitudes towards English.

This result was supported by a study conducted by Hofman (1977). Interestingly Hofman did not distinguish between the genders but seemed to suggest that cultural differences were more significant in terms of gender than attitude. Both boys and girls were also subjected to the same curriculum and English arguably tended to be perceived as a subject where all students were able to achieve.

(b) Hypothesis 1B

There is no significant difference between males and females regarding their mean self-concept of academic ability in English (SAAE).

To determine whether or not the females differed significantly from the males in terms of self-concept of academic ability in English, the mean of each group was calculated. The t test was used to determine whether or not the two means differed significantly. The results appear in table 4.17.

Table 4.17 Self-concept of academic ability in English of male and female students

Variable	Group	N	Mean (SAAE)	S	t-value	Df	p
SAAE	Female	134	83.57	8.76	0.58	269	p>0.05
	Male	137	82.92	9.27			
Total		271					

Interpretation

According to table 4.17 a t value of 0.58 was obtained ($p>0.05$). Therefore the null hypothesis could not be rejected. There was no significant difference between males and females regarding their mean self-concepts of academic ability in English.

In terms of self-concept with regard to gender the research study of Mboya's (1998) concluded that gender differences appear to be negligible. Mboya cited the extensive work of Wylie (1961), who said there was little convincing research evidence supporting differences in the self-concept of males and females. Therefore these contentions support

the finding of this investigation that there was no significant difference between the genders in terms of self-concept of academic ability in English.

(c) Hypothesis 1C

There is no significant difference between males and females regarding their mean perceptions of their teachers of English (SPT)

To determine whether or not the females differed significantly from the males in terms of student perceptions of their teachers of English, the mean of each group was calculated. The t test was used to determine whether or not the two means differed significantly. The results appear in table 4.18

Table 4.18 Perceptions of their teachers of English of male and female students

Variable	Group	N	Mean (SPT)	S	t-value	Df	p
	Females	134	92.79	11.67	0.04	269	p>0.05
	Males	137	92.73	13.08			
Total		271					

Interpretation

According to table 4.18 a t value of 0.04 was obtained ($p>0.05$). Therefore the null hypothesis could not be rejected. There was no significant difference between males and females regarding their mean perceptions of their teachers of English.

As far as student perceptions of their teachers is concerned studies by Masutha & Ackerman, (1999:243), Dartez (1990: 128) and Homburger (1991:181), suggested that female students had more positive perceptions of teachers than their male counterparts.

These results run contrary to the results of this investigation where there were no significant differences between males and females concerning perceptions of teachers.

In Zimbabwe students arguably see their teachers of English as facilitators and perhaps as instruments in their quest for adequacy in the language. Emotional response towards the teaching of the subject and the teacher of the subject, seemed to play little part in student orientation towards the subject.

(d) Hypothesis 2A

There is no significant difference between the students who speak different home languages regarding their mean attitudes towards English.

To determine whether the three language groups Shona, Ndebele and English differed in relation to their attitudes towards English, the mean of each group was calculated. An F test was used in order to determine whether the means of the groups differed significantly. The results appear in table 4.19.

Table 4.19 The attitudes towards English of students with different home languages

	N	Mean (ATE)	S
1 Shona	212	43.75	4.87
2 Ndebele	7	45.28	3.04
3 English	40	43.30	5.30
Total	259		

F = 0.51: df = (2,256) ; p >0.05

Interpretation

The F test analysis showed that the null hypothesis could not be rejected ($p>0.05$). There was no significant difference between the mean attitude towards English between Shona, Ndebele and English speaking students.

This result runs contrary to the results of the survey of students conducted by Hoffman (1977). He found that there were distinct attitudinal differences between native English speakers and those who spoke Shona and Ndebele (which he classed as African). The latter felt impassioned about their languages which they perhaps found to be under threat by the dominant English language.

What might explain this finding is the omnipresence of English within the Zimbabwean education system. In order to be considered educationally literate in Zimbabwean society one needs to be fully conversant in English. The school system, certainly and especially in the urban areas, ensures this by making the schools from grade 4 in the primary sector, English medium schools.

(e) Hypothesis 2B

There is no significant difference between students who speak different home languages regarding their mean self-concepts of academic ability in English.

To determine whether the three language groups Shona, Ndebele and English differed significantly in relation to their self-concepts of academic ability, the mean of each group was calculated. An F test was then used to determine whether or not the means of the groups differed significantly. The results appear in table 4.20.

Table 4.20 The self-concepts of academic ability of students with different home languages

Language	N	Mean SCE	S
1 Shona	212	83.18	8.89
2 Ndebele	7	84.71	8.19
3 English	40	83.82	10.43
Total	259		

F = 0.17 ; df = (2,256) ; p > 0.05

Interpretation

The F test showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean self-concept of academic ability in English between the three language groups Shona, Ndebele and English speaking students.

Four out of the five schools from where the data emerged, were schools almost totally dominated by one ethnic group. The only school which in Mpofu's (1999) term was 'multi-racial' was the private school. Mpofu (1999) findings suggested that children, in this case indigenous Zimbabweans who go to 'white' schools, in Zimbabwe, self-concepts are not affected since they tend to assume a 'bicultural competence'. That is they tend to be from an elite group who also tend to adopt the values and norms of their 'white' counterparts whilst retaining their own cultural roots.

(f) Hypothesis 2C

There is no significant difference between students who speak different home languages regarding their mean perceptions of their teachers of English.

To determine whether or not the three language groups Shona, Ndebele and English differed significantly in relation to their perceptions of their teachers of English, the mean of each group was calculated. An F test was then used to determine whether or not the means of the groups differed significantly. The results appear in table 4.21.

Table 4.21 Student perceptions of their teachers of English who have different Home languages

Language	N	Mean (SPT)	S
1 Shona	212	93.90	11.47
2 Ndebele	7	90.85	11.65
3 English	40	88.87	14.38
Total	259		

F = 3.09: df = (2,256) ; p< 0.05

Interpretation

The F test showed that the null hypothesis could be rejected ($p < 0.05$). There was a significant difference between the mean student perceptions of their teachers of English, between students who spoke Shona, Ndebele or English.

In order to determine between which groups differences existed, (pair-wise comparisons), the Bonferroni post hoc comparison test was used. These values appear in table 4.22.

Table 4.22 Bonferroni test analysis of language group differences ; student perceptions of their teachers of English

Groups	Difference between the means	t- value (Bonferroni) (df = 256)	Significance (p)
1 - 2	3.04	t < 2.41	p > 0.05
1 - 3	5.06	t > 2.41	P < 0.05
2 - 3	1.98	t < 2.41	p > 0.05

Interpretation

According to the results in table 4.22 there was a significant difference between groups 1 and 3 ($p < 0.05$) but there was no significant difference between groups 1 and 2 and groups 2 and 3.

The significant difference between the mean scores of group 1 (Shona) and group 3 (English), in terms of student perceptions of their teachers of English, seemed to suggest the importance placed on English in general and the teacher of the subject in particular. The Shona language was the dominant one in terms of numbers who speak the language in Zimbabwe and the students doubtlessly felt comfortable in that language even in the English medium school which they attended, where in any event Shona dominated outside lessons. On the other hand those who spoke English as their first language went to a school where English predominated in and out of the classroom and thus their perceptions of their teachers of English were likely to be more sympathetic.

The fact that there were no significant differences between group 1 and 2 suggests that they viewed their teachers of English in a similar manner. What is interesting is the finding that there were no significant differences between how Ndebele students perceived their teachers of English and that of English speaking students. This suggests that, although the Ndebele sample was small, they felt that English is a passport to greater success in school and the subsequent job market. The Ndebeles form only a very small minority of Manicaland's population (the vast majority of the population speak Shona). They need all their 'navigational' skills (through perhaps the medium of English), to wend their way through the impediments, cultural and otherwise, in Manicaland.

(g) Hypothesis 3A

There is no significant difference between the mean attitudes towards English of students who live in different areas.

To determine whether or not student attitudes towards English differed significantly depending on the area in which students lived, the mean of each group was calculated. One group lived in a high density (township) area whilst the other group lived in a low density suburban area.

A t test was then used to determine whether or not the means of the two groups differed significantly. The results appear in table 4.23.

Table 4.23 Attitude towards English and the area of domicile

Variable	Area	N	Mean (ATE)	S	t-value (df = 269)	p
Attitude towards English (ATE)	1 High density	114	43.33	4.72	0.69	p> 0.05
	2 Low density	157	43.76	5.21		
Total		271				

Interpretation

According to table 4.23 a t- value of 0.69 ($p>0.05$) was obtained. Therefore the null hypothesis could not be rejected. There was no significant difference between the mean attitudes towards English of students who lived in high or low density areas.

This finding appears to be surprising but the prevailing socio-economic conditions in Zimbabwe have not only seriously hampered social mobility; that is movement from high density (township) housing to the low density 'leafy' suburbs, but in some instances people have moved from the low density to the high density areas. The majority of people however remain in the high density areas because they are economically impoverished but not necessarily intellectually or socially so. Many people who live in the high density areas are middle-class in orientation and among other things, aspire to send their offspring to schools located in low density areas.

(h) Hypothesis 3B

There is no significant difference between the mean self-concepts of academic ability in English of students who live in different areas.

To determine whether or not self-concepts of academic ability differed significantly depending on the area in which students live, the mean of each group was calculated. The t test was used to determine whether the two means differed significantly. The results appear in table 4.24.

Table 4.24 Self-concept of academic ability in English and area of domicile

Variable	Area	N	Mean (SAAE)	S	t-value (df = 269)	p
Self-concept of Academic Ability in English (SAAE)	1 High Density	114	82.28	8.19	1.50	p>0.05
	2 Low Density	157	83.94	9.53		
Total		271				

Interpretation

According to table 4.24 a t value of 1.50 was obtained ($p>0.05$). Therefore the null hypothesis could not be rejected. There was no significant difference between students' self- concepts of academic ability who resided in different areas.

The findings here again were supported by what was said earlier regarding attitude. The students, although living in economically different environments, were still in possession of middle-class values since the price of housing and accommodation in the 'leafy' suburbs, had outstripped their expendable incomes.

(i) Hypothesis 3C

There is no significant difference between the mean perceptions of their teachers of English of students who live in different areas.

To determine whether or not student perceptions of their teachers of English differed significantly, depending upon the area in which they lived, the mean of each group was calculated. The t test was used in order to determine whether or not the groups differed significantly. The results appear in table 4.25.

Table 4.25 Student perceptions of their teachers of English and area of domicile

Variable	Area	N	Mean (SPT)	S	t- value (df =269)	p
Student Perceptions of Their Teachers of English	High Density	114	94.52	9.96	2.01	p<0.05
	Low Density	157	91.47	13.77		
Total		271				

Interpretation

According to table 4.25 a t value of 2.01 was obtained ($p < 0.05$). Therefore the null hypothesis was rejected. There was a significant difference between students who lived in high and low density areas and their perceptions of their teachers of English.

The students living in high density areas had significantly higher mean perceptions of their teachers of English than students living in low density areas. This finding may be explained by the fact that all the students whose first language is English living in the high density areas were more appreciative of their teachers of English since the English language is a vehicle for social and occupational mobility.

(j) Hypothesis 4A

There is no significant difference between the mean attitudes towards English of students who attend different types of school.

The school types were as follows:-a high density co-ed, a low density girls , a low density boys, a church co-ed and a private school.

To determine whether or not the student attitudes towards their teachers of English differed significantly, the mean of the attitude of students in each school type was calculated and compared. The F test was then used to determine whether or not the means of the groups differed significantly. The results appear in table 4.26.

Table 4.26 Student attitudes toward English and school type

School type	N	Mean (ATE)	S
1 High density co-ed	53	43.45	5.71
2 Low density girls	59	43.23	4.86
3 Low density boys	58	45.39	3.69
4 Church related co-ed	60	43.61	4.94
5 Private	41	41.60	5.31
Total	271		

F = 3.71 ; df = (4,266) ; p <0.05

Interpretation

The F test showed that the null hypothesis could be rejected ($p < 0.05$). There was a significant difference between students who attended different types of school regarding their mean attitudes towards English.

In order to determine between which groups significant differences existed, (pair-wise comparisons), the Bonferroni post hoc comparison test was used. These values appear in table 4.27.

Table 4.27 Bonferroni test analysis of student attitudes towards English and school type

School Type	Difference between the means	Bonferroni test (df = 266)	p
3 - 4	1.77	t < 2.83	p > 0.05
3 - 1	1.94	t < 2.83	p > 0.05
3 - 2	2.15	t < 2.83	p > 0.05
3 - 5	3.78	t > 2.83	p < 0.05
4 - 1	0.16	t < 2.83	p > 0.05
4 - 2	0.37	t < 2.83	p > 0.05
4 - 5	2.00	t < 2.83	p > 0.05
1 - 2	0.21	t < 2.83	p > 0.05
1 - 5	1.84	t < 2.83	p > 0.05
2 - 5	1.62	t < 2.83	P > 0.05

Interpretation

The Bonferroni t-values in table 4.27 showed that there was a significant difference between students attending school 5 (the independent/private school) and students attending school 3 (the low density boys school), in attitudes towards English ($p < 0.05$). The other pair – wise comparisons showed no significant differences.

This could be attributed to the environment of the independent school which not only had a predominance of English speakers but also a predominantly English mode of communication both formally and informally, in and out of the classroom. Therefore English was normative in its usage. In contrast, the use of English in the low density boys' school where English was largely restricted to the classroom, may have appeared as an imposition to the predominantly Shona speaking boys. Another possible cause of the

difference was that the catchment area for the boys' school was largely the high density suburbs where parents perhaps saw the school as a medium for 'upgrading' the standards of their children who may have come from households ill-equipped in many of the resources required for a good foundation to the learning process.

(k) Hypothesis 4B

There is no significant difference between the mean self-concepts of academic ability in English of students attending different types of school

The school types were as follows:-a high density co-ed, a low density girls, a low density boys, a church co-ed and a private school.

To determine whether the mean self-concept of academic ability in English differed significantly depending on the school attended, the mean of each school type was calculated. The F test was then used to determine whether or not the means of the groups differed significantly. The results appear in table 4.28.

Table 4.28 Student self-concept of academic ability and school type

School type	N	Mean (SAAE)	S
1. High den. co-ed	53	83.96	9.60
2. Low den. girls	59	83.91	6.90
3. Low den. boys	58	83.82	9.15
4. Church	60	82.36	9.59
5. Private	41	81.80	9.94
Total	271		

F = 0.63: df = (4,266); p > 0.05

Interpretation

On the basis of the results obtained, the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean self-concepts of academic ability of students attending different types of schools.

This was not surprising since the schools as individual institutions operated in a similar fashion in terms of the curriculum and examination system offered in Zimbabwe.

(l) Hypothesis 4C

There is no significant difference between the mean perceptions of their teachers of English of students attending different types of school.

The school types were as follows:- a high density boys, a low density girls, a low density boys, a church co-ed and a private school.

To determine whether or not the student perceptions of their teachers of English differed significantly according to type of school attended, the mean of each school type was calculated. The F test was then used in order to determine whether or not the means of the school types differed significantly. The results appear in table 4.29.

Table 4.29 Student perceptions of their teachers of English and school type

School Type	N	Mean (SPT)	S
1	53	86.98	16.03
2	59	98.28	8.82
3	58	94.58	9.13
4	60	94.68	11.17
5	41	86.87	12.23
Total	271		

F = 9.99; df = (4,266) ; p<0.05

Interpretation

On the basis of the results obtained, the null hypothesis could be rejected ($p < 0.05$). There was a significant difference between the mean perceptions of their teachers of English of students attending different schools.

In order to determine between which schools these significant differences existed (pair-wise comparisons), the Bonferroni post hoc comparison test was used. These values appear in table 4.30.

Table 4.30 Bonferroni test analysis of student perceptions of their teachers of English and school type

School Type	Difference between the means	t-value (Bonferroni) (df = 266)	P
2 - 4	3.60	t <2.83	p >0.05
2 - 3	3.70	t <2.83	p >0.05
2 - 1	11.30	t >2.83	p <0.05
2 - 5	11.41	t >2.83	p <0.05
4 - 3	0.09	t <2.83	p >0.05
4 - 1	7.70	t >2.83	p <0.05
4 - 5	7.80	t >2.83	p <0.05
3 - 1	7.60	t >2.83	p <0.05
3 - 5	7.70	t >2.83	p <0.05
1 - 5	0.10	t <2.83	p >0.05

Interpretation

According to table 4.30, there were significant differences ($p < 0.05$), between school type 2 (low density girls) and 1 (high density co-ed), school type 2 (low density girls) and 5 (independent/private), school type 4 (mission/church) and 1 (high density co-ed), school type 4 (mission/church) and 5 (independent/private), school type 3 (low density boys) and 1 (high density co-ed) and school type 3 (low density boys) and 5 (independent/private), in terms of student perceptions of their teachers of English.

There were no significant differences between school types 2 (low density girls) and 4 (mission /church), school types 2 (low density girls) and 3 (low density boys) and school types 1 (high density co-ed) and 5 (independent/private).

The highest mean student perceptions of their teachers of English was attained by school type 2 (low density girls) of 98.28 followed by school type 4 (mission /church) 94.68. The others in descending order were school type 3 (low density boys), 94.58, school type 1 (high density co-ed), 86.98 and school type 5 (independent/private), 86.87.

The differences between the low density girls and the high density co-ed (school types 2 and 1) may be explained perhaps by two factors. The ethos of the girls' school was very much concerned with educating the girls to become refined, well read and presentable young ladies. Teachers therefore tended to be looked at in a respectful manner and as authorities both within their subject areas as well as authorities in terms of discipline. Secondly, the students largely came from middle and upper middle-class backgrounds where the majority lived near the school. On the other hand, those students from the high density co-ed school all came from their local catchment area and went to a school which had two teaching sessions, and was under resourced in terms of books and teachers. Other differences which were apparent between the low density girls school and the High density co-ed school, in terms of student perceptions of their teachers of English, could be attributed to the stability and quality of teaching staff. The girls' school had a very low turnover of staff largely selected by the school itself, whereas the high density school had a largely government appointed staff who were often in the school on a temporary basis.

As far as the differences between the low density boys school (school type 2) and the Independent school (school type 5), were concerned, the former had also been 'plagued' by a high staff turnover and a gross shortage of resources and materials within its English department and lacked a well resourced school library. This may have accounted for the differences in attitude towards English as a subject.

The differences between the Church/Mission school (school type 4) and the private school (school type 5), may be attributed to the fact that the church school, although English medium, was rather Shona in orientation. Some teachers even explained concepts in Shona and most of the staff was comfortable in that language. Therefore perhaps English and teachers of English did not enjoy the status of other subject teachers.

The differences between the low density boys school (school type 3) and the high density co-ed school (school type 1) were surprising since they were both similar in catchment

area although there was a minority of first language English speakers in the boys school which may have made the difference.

The differences between the boys' high school (school type 3) and the private school (school type 5) may again be attributed to the English speaking environment of the private school and its projection of an ethos which was both creative and literary (it had a regular creative magazine as well as clubs which encompassed debate and drama). This was very unlike the boys' school which seemed to be under resourced and plagued by staff instability.

(m) Hypothesis 5A

There is no significant difference between the mean attitudes towards English of students whose fathers have different levels of education.

To determine whether or not the attitudes differed significantly according to the fathers' level of education, the mean of each group was calculated. An F test was then used to determine whether or not the means of the groups differed significantly. The results appear in table 4.31.

Table 4.31 Student attitudes towards English and levels of fathers' education

Level of fathers education	N	Mean (ATE)	S
1 Primary school	20	44.00	4.14
2 Sec. school form 2	23	42.95	4.51
3 Sec. school form 4	82	43.75	4.81
4 College/University	139	43.57	5.57
Total	264		

F = 0.19: df = (3,260); p > 0.05

Interpretation

The F test analysis showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean attitudes towards English of students whose fathers had different levels of education.

This result may be attributed to conventional wisdom which suggests that fathers traditionally have less of an influence on their offspring than the mother.

(n) Hypothesis 5B

There is no significant difference between the mean self-concepts of academic ability of students whose fathers have different levels of education.

To determine whether or not self-concepts of academic ability differed according to father's level of education, the means of each group was calculated. An F test was then

used to determine whether or not the means of the groups differed significantly. The results appear in table 4.32.

Table 4.32 Student self-concept of academic ability and levels of fathers' education

Level of fathers education	N	Mean	S
1 Primary school	20	81.30	6.83
2 Sec. school form 2	23	83.60	7.44
3 Sec. school form 4	82	82.56	8.76
4 College/University	139	84.18	9.28
Total	264		

F = 1.00: df = (3,260) ; p> 0.05

Interpretation

The F test analysis showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean self-concepts of academic ability of students whose fathers had different levels of education.

This finding suggests that differences in the level of fathers' education do not mean significant differences in self-concepts of academic ability in English.

(o) Hypothesis 5C

There is no significant difference between the mean perceptions of teachers of English of students whose fathers have different levels of education.

To determine whether or not the student perceptions of their teachers of English differed significantly according to fathers level of education, the mean of each group, was calculated. An F test was then used to determine whether or not the means of the groups differed significantly. The results appear in table 4.33.

Table 4.33 Student perceptions of their teachers of English and levels of Fathers' education

Fathers level of education	N	Mean (SPT)	S
1 Primary school	20	95.50	8.53
2 Sec. school (form 2)	23	97.21	10.18
3 Sec. school (Form 4)	82	93.43	10.59
4 College/University	139	91.38	13.92
Total	264		

F = 1.99: df = (3,260) ; p > 0.05

Interpretation

According to the F test analysis the null hypothesis could not be rejected ($p>0.05$). Therefore there was no significant difference between students whose fathers had different levels of education and the mean perceptions students had of their teachers of English.

The reasons for this result again may be attributed to the lack of participation in a child's education that fathers traditionally have.

(p) Hypothesis 6A

There is no significant difference between the mean attitudes towards English of students whose mothers have different levels of education.

To determine whether or not the student attitudes towards English differed significantly according to the level of the mother's education, the mean of each group was calculated. An F test was then used to determine whether the means of the groups differed significantly. The results appear in table 4.34

Table 4.34 Student attitudes towards English and levels of mothers' education

Mothers level of education	N	Mean (ATE)	S
1 Primary school	27	44.33	4.14
2 Secondary school form 2	38	43.36	4.43
3 Secondary school form 4	90	44.21	4.72
4 College/ University	108	43.16	5.52
Total	263		

F = 0.93: df = (3,259) ; p > 0.05

Interpretation

The F test analysis showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean attitudes towards English of students whose mothers had different levels of education.

(q) Hypothesis 6B

There is no significant difference between the mean self-concepts of academic ability in English of students whose mothers have different levels of education.

To determine whether or not self-concepts of academic ability differed according to the level of mothers' education, the mean of each group was calculated. An F test was then

used to determine whether the means of the groups differed significantly. The results appear in table 4.35.

Table 4.35 Student self-concept of academic ability and levels of mother's education

Mothers level of Education	N	Mean (SAAE)	S
1 Primary school	27	84.33	7.56
2 Secondary school form 2	38	82.89	7.67
3 Secondary school form 4	90	82.60	9.44
4 College/ university	108	83.95	9.30
Total	263		

F = 0.51: df = (3,259) ; p > 0.05

Interpretation

The F test analysis showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean student self-concept of academic ability in English whose mothers had different levels of education.

(r) Hypothesis 6C

There is no significant difference between the mean perceptions students have of their teachers of English whose mothers have different levels of education.

To determine whether or not students' perceptions of their teachers of English differed significantly according to the level of mothers' education, the mean of each group was calculated. An F test was then used to determine whether the means of the groups differed significantly. The results appear in table 4.36.

Table 4.36 Student Perceptions of their teachers of English and levels of mother's education

Mothers level of education	N	Mean (SPT)	S
1 Primary school	27	96.51	8.20
2 Secondary school form 2	38	95.65	9.74
3 Secondary school form 4	90	93.94	11.94
4 College/ university	108	89.79	14.07
Total	263		

F = 3.91; df = (3,259) ; p > 0.05

Interpretation

The F test analysis showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean perceptions students had of their teachers of English whose mothers had different levels of education.

The reason for this finding may possibly be attributed to the notion that parents, notably mothers in this case, may prefer to leave any involvement in the acquisition of English, to

the experts in the field: the teachers of the subject. They would as a result possibly project a neutral attitude towards the language.

(s) Hypothesis 7A

There is no significant difference between the mean attitudes towards English of students who first start to learn English at different age levels.

To determine whether or not student attitudes towards English differed significantly according to the age when they first learnt the language, the mean of each age level was calculated. An F test was then used to determine whether the means of the groups differed significantly. The results appear in table 4.37.

Table 4.37 Students' attitudes towards English and the age when the learning of English began

Age level first started learning English	N	Mean (ATE)	S
1 0 - 4 years	102	43.36	5.16
2 5 - 7 years	136	43.78	4.97
3 8+ years	29	43.24	4.83
Total	267		

F =1.09; df = (2,264) ; p >0.05

Interpretation

The F test analysis showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the mean attitudes towards English of students who first started to learn English at different age levels.

(t) Hypothesis 7B

There is no significant difference between the mean self-concepts of academic ability in English of students who differ in the age when they first start to learn English.

In order to determine whether or not student self-concepts of academic ability in English differed significantly according to the age when they first started to learn the language, the mean of each age level was calculated. An F test was then used to determine whether the means of the groups differed significantly. The results appear in table 4.38.

Table 4.38 Student self-concept of academic ability in English and the age when the learning of English began

Age level first started learning English	N	Mean (SAAE)	S
1 0 - 4 years	102	85.73	8.86
2 5 - 7 years	136	81.95	8.50
3 8+ years	29	80.65	92.10
Total	267		

F = 6.98 ;df = (2,264) ; p< 0.05

Interpretation

The F test analysis showed that the null hypothesis could be rejected ($p < 0.05$). There was a significant difference between the mean self-concepts of academic ability of students who started to learn English at different age levels.

As a result a Bonferonni t test was performed in order to determine between which pair-wise comparison of groups there was a significant difference. Each group represented a different age level that is group 1 represented learning English between the ages of 0 – 4,

group 2 represented learning English between the ages of 5 – 7 and group 3 represented learning English from the age of 8 and above.

Table 4.39 Group comparisons of the mean self-concepts of academic ability in English in terms of different age levels when the learning of English began

Variable	Groups	Difference between the means	t-values (Bonferroni) (df = 264)	p
Self-concept of academic ability in English (SAAE)	1 - 2	3.77	t >2.40	p<0.05
	1 - 3	5.08	t >2.40	p <0.05
	2 - 3	1.30	t < 2.40	p > 0.05

Interpretation

According to table 4.39, there was a significant difference between groups 1 (who first started English between the ages of 0 –4) and 2 (who first started English between the ages of 5 – 7), in terms of self-concept of academic ability in English. This may be explained by the fact that many of the students surveyed first started English between the ages of 0 - 4 (38%), therefore were more comfortable in the language and perhaps more likely to have stronger self-concepts of academic ability in English. There was also a significant difference between groups 1 and 3. This result also seemed to indicate that those students who started English between the ages of 0 and 4 and those students who started the language later than the age of 8 differed significantly in their self-concepts of academic ability. This may be attributed to the reasons given above and also to the suggestion that those of largely European descent differed in terms of their self-concepts of academic ability in English, to those of indigenous descent.

There was no significant difference between groups 2 and 3.

(u) Hypothesis 7C

There is no significant difference between the mean perceptions of their teachers of English of students who first started to learn English at different age levels.

In order to determine whether or not student perceptions of their teachers of English differed significantly according to age level when they first started to learn the language, the mean of each age level was calculated. An F test was used to determine whether the means of the groups differed significantly. The results appear in table 4.40.

Table 4.40 Student perceptions of their teachers of English and the age level when English was first acquired

Age first started learning English	N	Mean (SPT)	S
1 0 - 4	102	91.44	13.83
2 5 - 7	136	93.80	11.74
3 8+	29	92.10	9.91
	267		

F = 1.09: df = (2,264) ; p > 0.05

The F test analysis showed that the null hypothesis could not be rejected ($p > 0.05$). There was no significant difference between the age students' first started to learn English and the mean student perceptions of their teachers of English.

(v) Hypothesis 8

There is no significant correlation between students' achievement in English and each of the following factors: attitudes towards English, self-concepts of academic ability and perceptions of their teachers of English respectively.

To determine the relationship between the three variables and achievement in English, Pearson's product correlation coefficients between the variables were calculated. The findings are reported in table 4.41.

Table 4.41 The correlations between the students' attitude towards English (ATE), Self-concept of academic ability in English (SAAE), perceptions of their teachers of English (SPT) and achievement in English

	Achievement in English	SAAE	ATE	SPT
Achievement In English	1.000			
SAAE	0.255 *	1.000		
ATE	- 0.064	0.421 *	1.000	
SPT	-0.068	0.457 *	0.397 *	1.000

* $p < 0.001$ (the other correlations are not significant)

Interpretation

The results in table 4.41 showed that the null hypothesis regarding the correlations between SAAE, ATE, SPT and achievement, could only be rejected in the case of SAAE and achievement ($p < 0.001$).

The self-concept of academic ability and its relationship to achievement has been well documented (see chapter 3). Pertinently the research work of Brookover et al (1964) and Marsh (1990) supported the notion that there is a relationship between self-concept of academic ability and academic achievement. Marsh (1990) in particular supported the

notion of a relationship between achievement in English and self-concept of ability in English.

From the results shown in table 4.41, the null hypothesis could not be rejected in the case of student attitudes towards English and achievement in English as well as student perceptions of their teachers of English and achievement in English. However the hypothesis could be rejected in the case of student self-concept of academic ability and its correlation to achievement in English. It yielded a correlation of 0.255 which was significant ($p < 0.05$).

This finding concurred with the research work undertaken by Brookover et al (1964) and Marsh (1990). Their work supported the notion that there is a relationship between self-concept of academic ability and academic performance. Marsh in particular supported the notion of a relationship between performance in English and self-concept of academic ability in English.

In addition it must be pointed out that the mutual correlations between the three affective factors were all significantly positive. Table 4.41 shows the following significant correlations:-

ATE and SAAE = 0.42156 ($p < 0.05$)

ATE and SPT = 0.39782 ($p < 0.05$)

SPT and SAAE = 0.45729 ($p < 0.05$)

This in turn demonstrated that they were interrelated and share responsibility for a person's personality attributions.

4.5.7 The results of the step-wise regression analysis

The results of the step-wise regression analyses which involved determining the influence of three independent variables (the three affective variables plus some biographical variables) on the dependent variable, achievement in English, is shown in table 4.42.

Table 4.42 Stepwise multiple regression analysis with independent variable achievement in English

Step	Variable	R – square (%)	F – value	Df	p
1	Area of Domicile	13.96	40.24	(1,248)	p <0.01
2	I.Q.	19.62	17.39	(2,247)	p <0.01
3	SAAE	22.92	10.54	(3,246)	p <0.01
4	ATE	25.65	9.00	(4,245)	p<0.01
5	School type	28.17	8.54	(5,244)	p<0.01
6	Mothers' education	31.23	10.82	(6,243)	p >0.05
7	Socio-economic status (SES)	31.91	2.40	(7,242)	p >0.05
8	SPT	32.46	1.99	(8,241)	p >0.05
9	Gender	32.76	1.04	(9,240)	p >0.05
10	Home language	32.89	0.47	(10,239)	p >0.05

Interpretation

Table 4.42 shows that the area in which students lived, whether in a high or low density area, explained most of the variance where the dependent variable was achievement in English (13.96%). However in total all the independent variables indicated in table 4.42 explained 0.3289 or 32.89% of the variance in achievement in English.

4.6 SUMMARY OF THE RESULTS AND FINDINGS

A questionnaire was constructed in order to collect the data for this study. It comprised of the following sections:-

Section A: Biographical data

There were twelve items in this section

Section B: Survey of attitudes towards English

There were thirteen items in this section

Section C: Self-concept of academic ability in English

There were twenty-six items in this section

Section D: Student perceptions of their teachers of English

There were thirty items in this section

4.6.1 Item analysis

An item analysis was completed for each of the three main sections of the questionnaire that is, section B, a survey of attitudes towards English, section C, self-concept of academic ability in English and section D, student perceptions of their teachers of English. All the items were retained in their appropriate sections.

4.6.2 Reliability

Cronbach's alpha reliability coefficients were calculated for each section of the questionnaire and yielded the following results:-

ATE: = 0.774 SAAE: = 0.838 SPT: =0.905

The Cronbach alpha reliability coefficient for ATE was fairly high whilst the Cronbach reliability coefficients for SAAE and SPT were high and very high respectively.

4.6.3 Hypotheses testing

By using Pearson's product moment correlations and analysis of variance techniques, stated hypotheses were subjected to testing. The following results were obtained:

4.6.3.1 The correlations between achievement in English and each affective factor ATE, SAAE AND SPT

Pearson's correlation coefficients for each of the affective factors and achievement in English were as follows:-

achievement and attitude towards English (ATE): $r = -0.064$ ($p > 0.05$)

achievement and self-concept of academic ability in English (SAAE): $r = 0.255$ ($p < 0.001$)

achievement and student perceptions of their teachers of English (SPT): $r = -0.068$ ($p > 0.05$)

The results showed that the null hypotheses regarding the correlations between SAAE, ATE and SPT and achievement in English, could only be rejected in the case of SAAE and achievement ($p < 0.001$).

4.6.3.2 The mutual correlations between SPT, SAAE and ATE

The mutual correlations between the affective factors SPT, SAAE and ATE were as follows:-

ATE and SAAE $r = 0.421$ ($p < 0.0001$)

ATE and SPT $r = 0.397$ ($p < 0.0001$)

SAAE and SPT $r = 0.457$ ($p < 0.0001$)

4.6.3.3 Differences between males and females regarding the variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English

The differences between males and females regarding the variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English were reported in tables 4.16, 4.17 and 4.18. In each case the null hypothesis could not be rejected. It was found that there were no significant differences between males and females regarding their mean attitudes towards English, their mean self-concepts of academic ability and their mean perceptions of their teachers of English.

4.6.3.4 Differences between home languages regarding variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English

The differences between the three language groups Shona, English and Ndebele regarding the variables (above) were reported in tables 4.19, 4.20 and 4.21. The null hypothesis could not be rejected in the case of the first two variables but in the case of the third one; student perceptions of their teachers of English, it could be rejected. In order to determine the differences between the language groups Shona, English and Ndebele regarding student perceptions of their teachers of English, pair-wise comparisons were made (see table 4.22). The Shona speaking group (group 1) and the English speaking group (group 3) differed significantly whilst the pair-wise comparisons between groups 1 and 2 and 2 and 3 found that there were no significant differences.

4.6.3.5 Differences between area of domicile regarding the variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English

The differences between students living in high and low density areas regarding the variables (above) are reported in tables 4.23, 4.24 and 4.25. The null hypothesis could not

be rejected in the case of the first two variables but in the case of the third variable student perceptions of their teachers of English, it could be rejected.

4.6.3.6 Differences between school types attended regarding the variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English

The differences between school types regarding the variables (above) were reported in tables 4.26, 4.27, 4.28 4.29 and 4.30. The null hypothesis could be rejected in terms of the variable attitude towards English. There was a significant difference between the school types regarding attitudes towards English. A pair-wise Bonferroni post hoc comparison test was conducted and a significant difference was found between students attending the private school and students attending the low density boys' school. There were no significant differences between the other schools regarding the variable (see table 4.27).

On the basis of the results obtained regarding the differences between school types and the variable self-concept of academic ability in English, the null hypothesis could not be rejected ($p>0.05$). There was no significant difference between the mean self-concepts of academic ability in English of students attending different types of school (see table 4.28).

On the basis of the results obtained regarding the differences between school types and the variable student perceptions of their teachers of English, the null hypothesis could be rejected. Significant differences were found between the low density girls school and the high density coed, the low density girls school and the private school, the church related school and the high density coed, the church related school and the private school, the low density boys school and the high density coed and finally the low density boys school and the private school (see tables 4.29 and 4.30).

4.6.3.7 Differences between fathers' level of education regarding the variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English

The differences between fathers' level of education regarding the three variables (above) were reported in tables 4.31, 4.32 and 4.33. According to the results obtained the null hypothesis could not be rejected in each case ($p > 0.05$). There were no significant differences between the mean of attitude towards English, self-concepts of academic ability in English and students perceptions of their teachers of English whose fathers had different levels of education.

4.6.3.8 Differences between mothers' level of education regarding the variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English

The differences between mothers' level of education regarding the three variables (above) were reported in tables 4.34, 4.35 and 4.36. According to the results obtained the null hypothesis could not be rejected in each case ($p > 0.05$). There were no significant differences between the mean attitudes towards English, self-concepts of academic ability in English and student perceptions of their teachers of English, of students whose mothers had different levels of education.

4.6.3.9 Differences between the age English was first acquired regarding the variables attitude towards English, self-concept of academic ability in English and student perceptions of their teachers of English

The differences between the age English was first acquired regarding the variables attitude towards English and student perceptions of their teachers of English were reported in tables 4.37 and 4.40. According to the results obtained, the null hypothesis could not be rejected in each case. There were no significant differences between the

mean attitudes towards English and student perceptions of their teachers of English, of students who first started to learn English at different age levels.

However the null hypothesis could be rejected in the case of the variable self-concept of academic ability in English of students who first started to learn English at different age levels (table 4.38) . A Bonferroni pair-wise comparison test was conducted in order to ascertain between which age groups the differences occurred (table 4.39).

There were significant differences between those who first started to learn English between the ages of 0 – 4 and those that started between 5 – 7. There were also significant differences between those who started to learn English between the ages of 0 – 4 and those who started after the age of 8. There were no significant differences between those who first started English between the ages of 5 – 7 and those who started at 8+.

4.6.3.10 Stepwise multiple regression analysis

The stepwise regression analysis (table 4.42) showed that the area in which students lived (high or low density areas), was the best single predictor of achievement in English (13.96% variance), followed by I.Q. (5.66% variance), SAAE (3.30% variance), ATE (2.73% variance), and school type (2.52% variance). In total, all the independent variables explained 32.89% of the variance in academic achievement in English.

4.7 SUMMARY AND CONCLUSIONS

Thus the results of the investigation revealed that there is some correspondence between the selected affective factors and the number of the chosen variables. Importantly it also revealed some indication of the role played by affective factors in education.

It may be confidently said that the affective factors of student attitudes towards English, student self-concepts of academic ability and student perceptions of their teachers of English, do share relationships to a lesser or greater extent with the variables which

include gender, area of domicile and school attended and importantly a significant relationship was indicated between the self-concept and academic performance.

These significant relationships need to be tempered by the results displayed in table 4.42 which demonstrate that the all variables selected take up 33% of the variance in terms of their influence on academic achievement. Therefore there were other factors at work.

Whilst this chapter discussed the way in which the empirical investigation was conducted and its results, the forthcoming chapter reports the findings of the investigation. It also makes recommendations on the basis of the findings.